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ABSTRACT

The booklet assesses the present status of education for the promotion of disarmament in various grade levels and learning environments throughout the world. It also identifies and recommends ways to make disarmament education more effective. Disarmament is interpreted as the process leading from the present system of armed nation states to an international system in which security will be provided by a global peace authority. The document is presented in six chapters. Chapter I identifies the purpose and limits of the study. Although some information was obtained from every continent, most of the data were taken from secondary school programs within the United States. Chapter II defines terms used in the study such as arms control and disarmament education. ChaPter III outlines obstacles to disarmament education in schools, colleges and universities, among the general public, and among political leaders. Chapter IV describes disarmament education in schools, colleges, adult education programs, and among media and political leaders. Chapter V offers recommendations for promoting disarmament education programs. Recommendations include following UNESCO mandates in the area of peace education; allocating funds to disarmament education and research; helping students understand conflict resolution; and offering public lectures on disarmament at universities. The final chapter presents conclusions. Two conclusions are that disarmament education programs should combine efforts to educate the public for peace and that more educational resources should be allocated to disarmament programs. The document concludes with a bibliography and a directory of peace education organizations. (DB)

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SEMINAR ON THE OBSTACLES TO DISARMAMENT
AND
THE WAYS OF OVERCOMING THEM

(3-7 April 1978)

A preliminary study of the obstacles to, the status of and the potential for education for the promotion of disarmament

Prepared by
Betty Reardon,

on behalf of the Peace Education Commission of the
International Peace Research Association

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The views expressed in this study are the sole responsibility of the author and do not necessarily represent the views of Unesco.

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A Preliminary Study of the Obstacles to, The Status of and Potential for Education for the Promotion of Disarmament

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1. The Purpose and Limits of this Study

The major purpose of this study is to assess the present status of education for the promotion of disarmament at various grade levels and in a variety of learning environments, and to diagnose some of the obstacles to such education. A related and equally significant purpose is to identify the opportunities for more effective education contributing to public understanding of disarmament and thereby to its achievement, and to make specific recommendations for exploiting these potentialities. It is important to note that this subject is as vast as it is crucial. It is perhaps the most crucial of any issue facing education in general, and education for international understanding and peace in particular. Therefore, any study of the subject particularly of the length of this one, will of nature be superficial and should be considered merely preliminary to further research, assessment and recommendations in the area.

The limits of this study were imposed not only by the length prescribed, but by the amount of time which was allotted to acquiring the basic information upon which the status report was drafted. As a result, the drafter's information is primarily from her own culture and her own discipline, the United States and secondary social education. Although some information was obtained from every continent, and from every type of learning environment and educational organization, it must be observed that information from outside the United States, and from areas of learning other than secondary formal schooling is limited. Nevertheless it must be emphasized that the report is primarily about disarmament education in the United States, and about secondary formal schooling. For in the time available the author was unable to collect sufficient data from other countries. Although the drafter has been for many years involved in transnational endeavors in peace education, and has, with her colleagues, attempted to work from a global perspective, this limitation of data base, as well as the fact that one individual did the drafting, must be kept in mind as the report is read. The original draft was reviewed by persons from several countries, and from different disciplinary perspectives, in an attempt to transcend the limitations of the study to the degree possible within the resources and time available.

Another limitation to the study is that its length does not permit adequate exploration of the relationship between the arms race and human rights. It is clearly evident that the economic and social rights of many are denied as a consequence of the resources diverted to arms production, and it becomes more and more evident that civil and political rights are subject to greater and greater repression as a result of the arms trade. Although the relationship is not explicitly explored in this study it should be stated that the basic assumption of the author is that the realization of human rights is the true basis for peace.

2. Definitions of Terms Used in the Study

Disarmament is a very broad term and often connotes different meanings to different persons. Within the context of this report, several terms will be used, each of which will have a reasonably specific meaning. "Disarmament" will refer to those processes and steps which are intended to lead from the present system of armed nation states, each charged with its own defense (the war system) to an international system in which nations need not be armed nor are they responsible for their own defense, having assigned the security function of the international community to some form of global authority charged with peacefully resolving disputes and defending the rights of the member states, (a peace system). "General and complete disarmament" will refer to the goal of having reduced arms among nations to only those necessary to maintain domestic order. "General and complete disarmament" will be virtually synonymous with "a peace system" and will indicate that appropriate institutions for conflict resolution, peacekeeping and the defense of the rights of nations and persons, have been established collaterally with the reduction of arms. "Arms control" will refer only to efforts to prevent an increase in the volume of arms production and/or their development, and "arms limitation" will refer to agreements among armed states to maintain and not go beyond a specific level of weaponry, in terms of volume and destructive capacity. It should be noted that arms limitation and arms control assumes no basic change in relationships among and between states, nor in the international security system, whereas disarmament, particularly general and complete disarmament, assumes a major change in the international political system. It is toward achieving such a change that education for disarmament should be directed.

"Disarmament education" will be used here to mean education for the promotion of general and complete disarmament. The objectives of such education should be: to enable people to understand the four concepts defined in the previous paragraph; to acquire some knowledge of what will be required to achieve successful results under the rubrick of each concept; to appreciate actual differences between the "limitation/controls" and "disarmament" concepts, especially in regard to the changes in relationships among states and the new global institutions which will be required to replace the former concepts with the latter as the objective of disarmament processes. Education for disarmament should also prepare citizens to understand the purposes and operations of these global institutions, to participate in their planning and to support governmental endeavors to bring them into being. Disarmament education should be presented from a global perspective, and it should comprise such subjects as arms and security, conflict resolution and the functions of conflict, human and national rights, and the means of their protection, and political institutions for providing security, resolving conflict and protecting rights, particularly at the global level. The economics of the world community, especially with regard to the conversion from military to peaceful uses of much of the world's present productive capacity, is also crucial to such education as are other measures towards arms control and disarmament such as denuclearized zones, test bans and no first use agreements. In short, disarmament education must deal not only with armaments, but also with conflict, human rights, economic development, and policies for structural change.

Such education can only be achieved by the full recognition and application of the guiding principles outlined in the 1974 UNESCO Recommendation concerning Education for International Understanding, Co-operation and Peace, and Education relating to Human Rights and Fundamental Freedoms, which calls for "a global perspective, an understanding and respect for various cultures, awareness of global interdependence," and most important of all, "decision-making based on free discussion and value judgments based on rational analysis of relevant facts and factors." It should also be noted that these guiding principles cannot be fulfilled without attention to the issues and problems of disarmament, and that the ethical and civic aspects of education called for by the Recommendation, are in essence a call to make education an instrument for transition from a war to a peace system. Only through a "critical analysis of the historical and contemporary factors of an economic and political nature underlying the contradictions and tensions between countries, together with the study of ways of overcoming these contradictions, which are the real impediments to understanding true international cooperation and the development of world peace," will disarmament and the peace system be attained. It is only through such measures that education can help to achieve "the true interest of peoples and their incompatibility with the interests of monopolistic groups holding economic and political power which practice exploitation and foment war."[1]

The moral, civic, cultural, scientific and technical elements of international education must focus clearly on the varied and crucial issues of disarmament. Questions regarding the ethical acceptability of weapons of mass destruction and the arms trade must be explored, together with such issues as the civic responsibility of citizens to question governmental policies which encourage arms development and arms trade. How secure is a nation in which acute human needs go unfulfilled because of the enormous expenditure of resources on weapons production? Should the scientific and technical expertise of the human family be used to so great an extent on the perfection of weaponry and techniques of warfare? Learners in all environments, citizens of all societies, should be able to reflect constructively on these questions and to offer responses which can help to bring about the needed structural changes to move the world from the war system to a peace system. Thus it can be concluded that disarmament is a concept essential and central to the fulfillment of the 1974 UNESCO Recommendation, and indeed that the purpose of the Recommendation is to help us to achieve a peace system, thereby increasing the chances of human survival.

3. Problems of and Obstacles to Education for Disarmament

3.1 General Aspects of the Problem

Obstacles to adequate education for the promotion of disarmament fall into three general categories, political, perceptual, and pedagogical.

3.1.1. Among political obstacles to disarmament is first and foremost the international system itself, which recognizes the right of all nations to arm in their own defense and to use armed force in the pursuit of their own interests. Although international law and the custom of international society have declared the use of armed force for aggressive or repressive purposes to be unacceptable, this has not significantly limited aggressive and repressive behavior on the part of many nations. Indeed, such behavior is intensified by the various conflicts which characterize the present world political scene. Conflicts of economic interest, of ideology, of the quest for dominance and power, carry with them the constant threat and frequent use of armed force. Not only do we face the danger of the ever more common occurrence of aggressive acts such as plane hijacking and terrorism, but border incidents, internal strife, international conflicts, and the ultimate exchange of nuclear weapons are ever present dangers. All such actions are generally deemed "unacceptable," and use of nuclear weapons believed to be of such horrific consequences as to be precluded on the part of rational political leadership.

Nonetheless the risks increase day by day, and the reality of minor violence certainly is not decreasing. The true tragedy here is that, for the most part, these political realities are viewed somewhat as natural phenomena, perceived as beyond the powers of ordinary human beings to deal with constructively. War and aggression are believed to be an inevitable part of the human experience, and the political intricacies of extracating ourselves from that system so complicated and complex as to defy the human imagination. Viewed in this respect, the political problems are as much problems of attitudes, of acceptance and lack of creative imagination as they are of both power politics and political structures. Problems of attitudes and imagination are essentially educational problems and, therefore, should be the concern of educators. They most certainly indicate the special political responsibility which educators have for the achievement of a disarmed world.

It is recognized that the fulfillment of this responsibility entails some political risk for educators, for there are few if any societies in which the desirability and necessity of the sovereign right of states to arm may be publicly questioned with impunity.

3.1.2. Although the political obstacles may seem the most severe, and the pedagogical the most challenging, it is actually in the perceptual obstacles that the key to both education and political action lies. What educators and political leaders need to understand is how people perceive the need for and functions of systems of security which depend on weaponry, particularly the present, highly destructive, technologically sophisticated weaponry. In response to a recent survey of peace educators concerning their perceptions of the major obstacles to disarmament, the following were most frequently mentioned as most severe, fear, militarism and ignorance.[2]

Fear of disarmament was very high on most lists, the fear coming from three subsidiary related fears. First among these seemed to be fear of the economic consequences of disarmament, of unemployment and economic dislocation in particular. Second, fear of "the enemy," and of being defenseless in a world in which one party or several might be disarmed, but most others were not. Closely related to this particular fear was the lack of trust of other nations, particularly but not exclusively, nations in competition or conflict with each other. Some even noted hatred as part of this fear. Hatred of various groups, political, racial, religious, or national, were especially noted. Another widespread but less clearly articulated fear was that of the unknown. People in general seem to have difficulties in envisioning a disarmed world and, therefore, fear what they cannot describe to themselves as a reasonable set of living circumstances. Circumstances under which persons and nations would not need arms to defend themselves seem incomprehensible to many people.

Another important obstacle frequently mentioned, which may account for the incomprehensibility of a disarmed world, was the militarism of most societies, in which authority and dignity seem to be synonymous with strength and military might. Good citizenship consists of obeying authority, for fear of being subject to the imposition of that strength, being punished for "disloyalty." The idea of most people seems to be that it is far better for one's self and one's nation to participate in applying force and strength to other groups or nations with whom you are in competition rather than turning inwardly, having to apply force to dissenters. It is healthier to have an "enemy" against whom to arm. The belief that social order depends upon obeying military authority is quite widespread, as is an equation of dignity with strength, or strength with violence. These ideas, it was noted particularly by teacher educators, are reinforced by present methods of recording and teaching history. People educated by the public authority usually equate support of the military with patriotism, and dissent against military action or military strength as unpatriotic and treasonous at worst and at best ignorant and naive, a notion relating to the general distrust of others and lack of belief that all parties to the international war system would ever disarm. The educators surveyed also pointed, not only to a close relationship between the concept of a strong military and national security, but also to the relationship of personal identity to national security. The preservation of the nation preserves one's own identity, and the military provides a symbol of identity as well as service to the nation. The military carries certain altruistic social connotations which people do not want to abandon, not wishing to give up the idea of selfless public service, of the willingness even to give the ultimate sacrifice of life for the larger group, for one's nation. Some included among emotional obstacles to disarmament stemming from militarism the statement that there was a widely held, erroneous belief that human beings were rational, and would be rational and restrained in their use of weapons, a belief obviously not shared by the educator-respondents.

As educators they also indicated that ignorance was a major obstacle. People lack sufficient and appropriate information to perceive possibilities for disarmament. This they attributed not only to the emphasis on war and lack of emphasis on peaceful alternatives in history courses but, most especially, to the minimal amount of teacher training on questions of war, peace, and disarmament, to the minimal coverage by the media of major issues related to arms control and disarmament, which contributes to general public lack of understanding and, to the failures of political leadership to explain the issues involved clearly and comprehensively to the public and to emphasize questions of arms and security in any context other than appealing for funds to maintain them. In general, educators lamented the lack of understanding of the concepts of disarmament, and the widespread belief that the problems of arms control and disarmament were in the main too technical for the average citizen to deal with. This widespread ignorance, some asserted, made it possible for "the military industrial complex" to exploit its knowledge and sophistication about weaponry and maintain its specific interest in continued weapons production. This "complex" has been able to exercise an inordinate influence over both public policy and the type of information that is available to the public. Some indicated that there was a lack of interest among the public which may account for ignorance. But many seemed to feel that this lack of interest was primarily due to the failure of the media and political leadership to present disarmament issues to the public within a context comprehensible to most citizens.

The general consequences, they noted, seem to be a feeling that nothing can be done about the arms problem. It is virtually impossible. Nothing ever tried has ever worked, and most people perceive it to be a problem beyond the human capacity to resolve. It would appear then, that if these perceptual obstacles are not overcome, the problem cannot be resolved. The perceptual obstacles, may therefore, be the major issue to be confronted by educators concerned with the achievement of a disarmed world.

3.1.3. Pedagogical problems do in fact stem in large part from these perceptual obstacles. Pedagogical problems of education for disarmament fall into both the affective and cognitive domains. As the perceptual may be the key to both the political and the pedagogical, the affective may be even more crucial than the cognitive in the whole area of teaching and learning for a disarmed world.

As we review the perceptual problems, we see that they have a high emotional content, content which is very often avoided because of the emotional conflict and discomfort such perceptions usually cause. We know, for example, that it is not natural for human beings to seek to confront their own fears, and yet unless this is done sensitively and constructively, there is little hope of moving on to the content and the analysis required to understand the technical and political problems of disarmament. Educational programming in this area must recognize that such fears exist, must work toward constructive ways to enable people to deal with them and, if not to overcome them, at least to begin to explore the true reasons for such fears.

For example, education should help people to explore whether their fear of loss of security as a consequence of disarmament really stems from ignorance of alternative systems of security or if it is that all pervasive fear of change, the strange, the new, the alien or the unknown, the unexperienced. For if such is the case, affective learning has even greater importance than we assume. A word of optimism, however, is warranted here by the fact that part of the process of education for every small child is helping her, through life experience and by developing confidence in others such as her parents and teachers, to overcome such fears as those of abandonment, falling, and various other "natural disasters" which every person learns are subject to some degree to their own behavior. Persons come to understand by the time that they walk and talk, that they themselves have some responsibility for their own security and that others care for their welfare. Thus, we must realize that lack of self confidence and trust in others is a major obstacle to education for a warless world. Learning designed to create such confidence and trust must, therefore, be an integral part of disarmament education.

Closely related to fear is the emotion of hatred, hatred of an enemy who threatens our security, our life, and our identity, who does so because he holds values very different from ours and lives in a manner which appears to be less than "civilized" because it is so different from our own. Disarmament education should try to overcome such hatred through deliberate efforts to eradicate irrational prejudices be they cultural or ideological from all educational materials and practices. The misguided belief that inculcating such prejudices creates loyalties to one's own culture or nation has created a major problem for the kind of education we hope to develop. This problem can never be overcome, unless systematic efforts to root out these prejudices are undertaken by all educational systems. It is absolutely essential, as is noted in the Recommendation, that member states formulate policies for such improvement of international understanding, with special effort to overcome misconceptions and cultural ignorance, which often permit the toleration of injustice as well as the nurturing of fear of the enemy, which in turn nurtures the arms race. (See section IV.9 of the Recommendation.)

If, according to the guiding principles of the Recommendation, education is presented from a global perspective, students will come to understand that the human species has a common destiny on this planet, that we have more commonalities than differences, and that "respect for other people, their cultures, civilizations, values, and ways of life" (section III 4b) is absolutely essential to preservation of the human species, its cultural diversity and its physical survival. The Recommendation in recognizing that interdependence militates against the continued acceptance of nationalistic forms of education which reinforce prejudice and stand as arguments for the continued maintenance of the arms system has pinpointed a major source of affective obstacles to disarmament education. Thus, the most essential corrective to the emotional obstacles of fear, hatred, and prejudice is a fundamental respect for life and human dignity in accordance with the principles of the Universal Declaration of Human Rights. The absolute core of all social education, all learning environments, must be a fundamental commitment to the dignity of the human person and the insistance that the right of everyone to full human rights must be respected by all persons and all governments.

Further, it cannot be overemphasized that the most fundamental human right, the right to life, cannot be pursued without peace. War, the indiscriminate consumer of human lives, is in direct contradiction to the principles of human rights. Disarmament education should illuminate this contradiction.

If such is the case, it may not be even necessary to "stress the inadmissability of the recourse to war." (See section III, 6.)

In the cognitive area of factual knowledge, the most severe obstacles are lack of general information and lack of emphasis on two particular areas of information. The first and perhaps most obvious lack is that of emphasis on a systemic interpretation of either the world political system or the world ecological system. By and large, there is still a compartmentalized, linear and chronological organization to most social education. Students, as indeed most citizens, fail to understand the systemic nature of the human social order, particularly at the global political level. They do not comprehend, therefore, that each nation is but one component of a total system, that its actions and reactions are affected and conditioned by the other components, and that unilateral, even bilateral or multilateral actions are of necessity severely limited and almost always inadequate to the attainment of any single objective throughout the world political system.

The second particular lack is in the limited attention given in formal curricula, to international institutions and organizations. There is little information presented about the United Nations and virtually nothing is taught about United Nations efforts in the area of disarmament. Indeed, the substantive study of disarmament as such, has almost no place in the required curricula of schools and in comparatively few universities throughout the world. It would appear that the only people well informed or even having a minimal comprehension of the concepts of disarmament and arms control are those who develop on their own a special interest in the subject, independently educate themselves, some of them, much to the common benefit of the world at large, becoming experts in the area. Many of these people are active in non-governmental organizations about which more will appear later in the report. There is no lack of expertise as such. The lack is in the transfer of this expertise and information to a public large enough to form an adequate political support base for its application to the achievement of peace. Disarmament, because it has been presented, as previously mentioned, as a highly technical and politically sensitive subject, is a rather esoteric one in most educational settings. Most of the full courses currently offered are in a few research centers and graduate schools.

One cognitive obstacle, even more lamentable in that there are no technological obfuscations to prevent consideration in curricula and private discussions, is the paucity of information on alternatives to the arms system, both actual and historical, as well as proposed and potential. As the concept of disarmament is hardly known to the general public, the concepts of non-violent processes for social change and conflict resolution are equally unknown. The ever-growing field of scholarship on non-violent alternatives as well as other less radical substitutions for the arms system is rich in substance which should be included in the knowledge base of contemporary social education. Although it may appear that these alternatives represent too great a threat to the established order, or the present power arrangements in the world political system, it should be noted that all such proposals are not built upon reallocation or re-ordering of power, but some simply advocate different modes of exercising power, and enforcing decisions of existing authority. There are a wide range of alternatives to armed force stemming from various philosophic, political and ideological bases, which could and should be considered wherever there is real concern to limit the arms race and to avoid the potential destruction it threatens.

3.2 Obstacles at the Elementary Level

Looking at specific obstacles to education for disarmament within particular educational settings, it seems almost ironic that so large and technical a problem as disarmament is perhaps most seriously impeded by the educational experience of the very young, sometimes even before their entry into elementary school. Not only is the problem affected by the lack of opportunities for young children to have cross cultural experiences or to know and understand lifestyles other than those of their own immediate family and culture, but even more serious is the socialization process which enforces a belief that the child's own culture is preferable if not superior to most or all other cultures.

With very few exceptions, socialization seems also to foster the idea that every cultural group is competitive with other groups and must struggle against them to achieve fulfillment and survival. This enforcement of the concept of competition as the route to fulfillment and recognition unfortunately can even be seen within families, in that children frequently must compete and struggle for the attention of their parents, or for other benefits coming from special recognition. Blame for such competition is not to be laid only at the feet of the parents, but to the societies in general, most of which do place higher value on some persons than on others, thereby encouraging competition, and ultimately nurturing the idea of force, aggression and competitive modes for the achievement of self assertion and identity. Such forms of behavior provide a psychological base for the acceptance of the competitive nation-state system and of the psychological, social and political environment which makes the arms race possible.

Although there is more often than not a conscious effort on the part of parents and teachers to discourage violent behavior among and between children, there has not been sufficient attention to the encouragement of certain forms of competitiveness. The high value that is placed on winning and being "the best" or "the strongest" often contributes to the acceptance of force. Indeed, the larger social order constantly re-inforces the lesson that force and violence are effective means to achieving goals, and when imposed against those who are different from you, are acceptable as well as effective.

It should be noted that these circumstances are not so pronounced in all societies, and that there are some societies which are characterized by a basically cooperative ethic throughout. Noteworthy among such societies are the recently discovered Tasaday, a stone-age people living in the Philippines. If such simple societies represent the human species in its "natural state," we have reason for hope. They are a loving, cooperative people who have no word for "war" in their language. Among some cultures who put a higher value on tradition and human relations than on "modernization" and "efficiency," group cooperation is a strong socializing force, and individualism and competition as practiced in "modern industrial" societies is viewed as anti-normative. Mexican-American children, for example, have had difficulty in the strongly competitive individualistic United States school system. These children are taught by their traditions to cooperate with and help those in their ethnic group and to put a higher value on family and community than on self. Indeed, the system which has often categorized them as "slow learners" because of this value system could learn much from these children about the techniques of peace and community building. Other examples could be cited, but these two are sufficient to make the point.

It is equally worth noting, however, that the highest degree of competitive socialization exists in those societies which are the most active in the arms race, and there is virtually an inverse ratio between individualism and self-confidence.[3] That is, the more individualistic a society is in its drive to pursue its own aims without consideration of others within the system, the less confident it is of being able to pursue those interests without having recourse to force and extensive weapons systems. This circumstance is one which should be closely examined in formulating programs of education which are intended to socialize young people to a disarmed political system, for without understanding the close relationship of early socialization to the character of the social order, it is highly unlikely that we can develop education appropriate to the achievement of a disarmed world.

The foregoing observation does not indicate that all societies which have instituted the teaching of a cooperative ethic within their formal education systems, are not involved in the arms race. Indeed, some countries, put a very high emphasis on teamwork and cooperation and de-emphasize competition among and between children in school groups. Yet, in some of these same school programs, where cooperative games are encouraged and taught, military exercises are also carried out, and children learn the military ethic of cooperation with each other in competition against those who hold different ideologies or belong to different political systems. It would appear that there is a need to extend the cooperative ethic to the global level, and to equate friendship and interdependence with the need for global cooperation. There is an equal need to develop a comprehension of the negative consequences of competition, particularly when the competition results in armed combat, or preparation for armed combat.

Another significant factor in elementary education constituting an obstacle to education for disarmament is that it is in these early years, from approximately 6 to 10 years old, that the educational system encourages development of a national identity and national loyalty, which in and of itself, is a positive form of human development. However, within the context of a highly competitive nation-state system, that larger identity is often taken on as a competitive one, that is, people identify most strongly when they are in a competitive relationship, and when differences rather than similarities are emphasized. Although the transcendence of ethnic differences is encouraged within nations, the process of transcendence has not been sufficiently extended to cultures and political ideologies beyond the given nation-state. In times of actual or cold war, this national identification in the form of negation of other nations or other systems is most pronounced. And it is extremely difficult to overcome when such hostilities and competition have ceased in the formal sense. (See Reardon, "Nationalism and Survival.")[4]

In this same respect a very important influence on socialization of young children, (now particularly in urban industrialized areas, but it can be expected in other parts of the world with the rapid introduction of transistor radios) is the media. All pre-literate persons, but especially children with limited social experience, are profoundly affected by visual and oral messages and images projected through the media. Much of this affect is contrary to international understanding, peace and human rights. In the United States, for example, young children are given prejudicial views of the people of Japan and Germany through the telecasting of films produced during the Second World War to rally the American people against their "enemies." The media affect not only children's perceptions of other people and other cultures negatively, but also apparently affect children's attitudes toward violence. Although there is still some controversy over the effect of media on the development and acceptance of violent behavior, there is a growing feeling among educators, largely as a result of observing immediate behavior and listening to the analogies children make, that the media are encouraging admiration for and emulation of violent behavior. Many also believe that media impact negatively on children's ability to comprehend the real human consequences of violence, the facts of death and destruction, and the true nature of war.

In that many areas of the world in the process of capitalist industrialization are importing some of these same television programs and films, and using many of the slick media techniques, this is a condition which can be considered to be insipiently, if not actually, global, and, therefore, a general obstacle to disarmament education among young children throughout the world.

3.3 Obstacles to Disarmament Education at the Secondary Level

It is at the secondary level where more formal citizenship or social education is usually provided, in the years from approximately 13 to 18 that young people learn about the operations of their government, the philosophy and ideology which inform their governmental processes, and the positions of their governments in the world political system. It is also at this stage that they move from the general patriotic stories and legends of their nations, to a somewhat more detailed and sophisticated accounting of their national histories. Thus, the nationalistic aspects of education, begun at the elementary level, are re-inforced at a higher level of detail and sophistication in the education of adolescents.

It is equally important to note that it is the late adolescents who usually make up the major portion of fighting forces in time of warfare, and that youngsters go from secondary school into the armed forces. If they enlist or if they are drafted, it is usually about the age of 18. Thus one of the functions of secondary education, particularly of boys, has been to educate for the support of and service in the military. Some analysts believe that the extreme emphasis on competitive sports, particularly body contact sports among adolescent boys, has been an important contributing factor to the acceptance of military service, or, if you will, a sort of pre-military training. Outbreaks of violence at football matches support this opinion as does the infamous "Soccer War." In recent years, professional athletes in the United States who have reflected upon the social consequences of some of these sports, have become advocates of new forms of physical education eliminating competitive games, particularly games which are competitive with outside groups such as other schools or other states, where the "otherness" is a reason for competing with and winning out over an opponent. For years, of course, there have been observations among former imperial powers such as Britain, that the extreme discipline of boys' secondary schools, together with their training on the sports field, provided the kind of military efficiency which made possible the building of an empire.

In addition to the sporting aspect of physical competition as a preparation for the military, in some schools, particularly in the United States, there is actual formal conscription into a pre-military service, such as the Junior ROTC, which gives young people recreational and financial rewards for devoting some of their time to the study of military techniques, drill, and so forth. There is, in fact, a growing movement among those concerned with peace, to prevent the conscription of young Americans into ROTC, at least at the secondary school level, if not at the university level. The most systematic efforts are being made in Japan and in the United States by the Committee on Militarism in Education.[5]

At the secondary level, the curriculum itself can also be viewed as an obstacle to disarmament education. The extreme nationalism of the study of history has been researched and found to have given a distorted view of the behavior of nations, particularly nations which have been at war with each other.[6] Prejudice and ethnocentrism seem to be more strongly reflected in history and social education texts than in others. Further, history at the secondary level emphasizes wars, rarely the story of wars which were avoided or events in which there was peaceful resolution of conflict. Such history re-inforces the attitude that war is inevitable, to be expected as a continuous part of the human experience, and that there are few, if any, alternatives to war for playing out international competition or in the pursuit of national goals.

Although there is a growing effort among global and peace educators to introduce subjects such as conflict resolution, peacemaking, alternatives to violence, these are as yet, very limited, often looked upon with great suspicion, as unpatriotic or the devious plots of a competing or enemy state. Throughout the world there is lamentably little information taught to students in secondary schools about other cultures, about the world in general and about human rights, peace and disarmament in particular. In some areas, while they were under colonial control, the information taught about the indigenous cultures was very limited, even distorted. Young people were usually taught more about the history of the colonial power than of their own people. Such nations must now build completely new curricula to teach their young their own national experience. Sometimes this need to provide an essential part of the social education of young people in the newly independent countries has prevented them from giving sufficient attention to other parts of the world, and the ethnocentrism of the colonial period which enforced a misfocused parochialism on education in the industrialized world has yet to be overcome.

Although there are some efforts at multi-cultural education in a global perspective, for the most part, these are still far too limited. A truly diverse cultural education in a global perspective is required as a basis for international understanding and a climate in which disarmament will be, or can be, pursued.

In sum then, secondary education is by and large, too parochial and ethnocentric for the purposes of achieving a disarmed world, and further, contains severe obstacles to that objective in the nationalistic forms of social education, in the competitive forms of physical education and in some countries, military training and conscription.

3.4 Obstacles at the University Level

The major barriers to education for disarmament at the university level are those of lack of resources for innovative education and research, and the limitations of academic tradition.

Although there is a rapidly growing peace research and peace education movement in the universities in some countries, the resources available for the support of these efforts are scant. Only a very small fraction of a percent of the resources available to those scholars and researchers who are working on behalf of the weapons industry and the military establishment are used for peace research and education. One might say that war research and development outstrips by several hundred percent the work in peace research and development. For many years, the universities have been used as the sites of research, particularly engineering, physics and nuclear research, that has contributed, and continues to contribute, to the development and refinement of weaponry, both conventional and nuclear, as well as chemical and biological weapons.[7] For the most part, this has been funded by governments, with some funds coming as well from private foundations. With the exceptions of a few countries, such as Sweden, Germany, and the Netherlands, governments have not offered resources to peace research and peace education. The differential between the amount of resources going into war research and development and peace research and development in universities is in microcosm a reflection of the percentages of resources which go to the military as opposed to social needs.

Another serious barrier to appropriate education at the university level is the entrenchment of traditional disciplines which have given little or no attention to questions of peace and disarmament. Many scholars still view these questions as narrow segments of one discipline, and some assert that any inquiry into such subjects is advocacy rather than scholarship. (It might be noted, however, that research into weapons systems and the like is seldom viewed as advocacy of the arms race.) Thus, the practitioners of peace research and disarmament studies who require insights from and research by all of the disciplines, both scientific and behavioral, find it difficult to pursue their inquiries and teaching within the traditional pattern and curricula of the universities. Notwithstanding these obstacles, some universities have, in fact, established courses in and departments of peace studies which are innovative and interdisciplinary, often forming constructive linkages among and between other departments, even those of a strong traditional bias. But it should also be observed that even within peace studies departments there is as yet insufficient emphasis on arms and security issues. (Note: factual data on this subject as it relates to North America is contained in a survey carried out for UNESCO by the Consortium on Peace Research, Education and Development. The method used on the COPRED survey was statistical sampling, whereas this study was done in a more ethnographic manner.) Until all peace studies programs admit the necessity of including disarmament as a topic in their programs, even this field will not be adequate to the needs of education for a disarmed world.

A further obstacle at the university level is the role of the university in professional and vocational training. Since the war establishment far outstrips the peace establishment, opportunities for employment in the peace field and in the disarmament area are so limited as not to support the case for spending resources on this kind of education, if university education is to prepare people to make their livings. However, there are efforts to begin to identify a whole range of professions in the peacemaking area, from peacekeeping, a form of soldiering, through mediation, arbitration, and various kinds of conflict management, as well as means for the pursuit of social justice and human rights. But these are not yet widely enough known or practiced, and information is not yet sufficiently available to have an influence on course offerings within universities.

Systematizing this information, and publicizing the possibilities for professions in peace, is one of the objectives of the National Peace Academy Campaign in the United States, which seeks to establish a university level, educational institution of equal importance and alternative role to the military, naval and air force academies run at government expense.[8] Some progress toward clarifying the concepts of what would be involved in such an educational institution's program and purpose has been elaborated by the International Peace Academy with headquarters near the United Nations in New York.[9] The IPA program which has been carried out in various parts of the world has undertaken the training of conciliators, peacekeepers and peacemakers who return from this training to public service in many nations. Future graduates of IPA may serve in a world authority set up for peacekeeping and disarmament purposes within the United Nations or under its auspices.

Vigorous and successful as these projects have been, they are still dwarfed by education for the arms system. Military scholarships and training are provided frequently at universities, in addition to opportunities to attend national military academies in most countries. In some countries, scholarships are given to young men who commit themselves to a certain period of military service following the granting of their degrees. This, therefore, influences the type of education they receive, so that at the university level there are far many more offerings in military science than in peace science or inquiries into alternatives to arms or techniques for achieving disarmament.

3.5 Obstacles in the Non-Formal Educational Settings

The purposes of most non-formal educational programs are to meet immediate needs, usually within a limited geographical area. Very often the needs are community development needs. There is, therefore, a legitimate preoccupation in such programs with understanding the immediate environment and its potential for development, and with developing very specific skills for transforming that environment into an appropriate setting for a human community. Because of the pressure of immediate needs, and also because of the limitations on resources, only a few of these programs of non-formal education for community building have addressed themselves to some of the wider issues of global problems, and the relationship of the immediate social system or setting to the other components of the global social system. Among the most notable of efforts to make these linkages are those being conducted by an organization called CODECAL in Colombia,[10] and the programs projected by the Southeast Asian Global Community Education Project, the first phase of which is being developed in the Philippines.[11] Within these two programs, there is a systematic attempt to relate issues and problems of the local setting to the global system, and to provide education which will enable the program participants to take some part in formulating opinions and positions in relation to world politics.

In both cases the core concepts of the programs are the universality of human dignity and the equality of persons with emphasis on human rights. The programs attempt to build a sense of cultural identity and unique character among the Colombian and Philippine participants while engendering a sense of their place in the world and the potential contribution they can make to a peaceful and just world order. The learning experiences incorporate concepts of peace as they operate in families and local communities as well as on the global level, and the learners are encouraged to take up responsibility for the development of peaceful relations in all spheres of human relations, at both micro and macro levels. Both programs also emphasize the significance of the equal participation of women in the process of building peace and incorporate exploration of both "feminine" values as related to peace, and the present limited degree of women's participation in policy making related to issues of war and peace.

Although it is defensible to expend resources primarily on local concerns and local needs in non-formal education programs, it is however, somewhat questionable to exclude such global issues as the arms race from such programs. Concentration on local objectives as exclusive goals serves to disenfranchise persons in these local areas who do not participate in the larger global community and who have little or no say in the formation of global political policies, such as those relating to disarmament. Further, it is people in these settings who are most in need of the resources which many assert could be effectively converted to social and economic development, were arms expenditures to be reduced. These same people are the victims of the gross disparities in the distribution of the world's wealth which is a conflict root and potential cause of armed struggle.

Non-formal education for adolescents and children tends to be offered in two cases: 1) when formal schooling is not available or 2) when formal schooling is inappropriate to the behavior or learning style of the students or the values of their parents. The latter case which produces alternative and independent education can sometimes be an advantage, but more often is an obstacle to education for disarmament, at least in the United States, where such lack of adjustment to the formal schooling can be seen as a failure of the formal schooling to provide relevant education, or the failure of the school to interest students in what it offers. Relevance has, even from the point of view of some students, been defined in terms much too personal to adequately confront major societal issues. Further, all people (and youngsters are no exception) tend to be interested in what they already have some information about. Since information about disarmament, its consequences, and the problems of achieving it is so very limited, youngsters are not likely to request such courses, nor express interest in them. This same obstacle, resulting from lack of general information, is also to be found in adult education programs.

3.6 Obstacles in Adult Education

In the three most frequently practiced forms of adult education, there is, at present, little place for education about disarmament. Adult education is for the most part either enriching or compensatory, or, in the more formal settings, advanced training in technical and professional skills. When programs are compensatory, they reflect the offerings of the normal curriculum of the established school system. Since school systems do not focus notable attention on arms policy neither do compensatory programs for adults. The same condition prevails in the vocational and professional training. This is with the exception, of course, of the research and studies of those we have already indicated are preparing to become "experts." However, in the area of vocational training there are opportunities available through the armed forces, which by and large is training antithetical to purposes of disarmament, but we must say, not entirely so. Vocational training through the armed forces deals mainly with methods for the use of arms, the repairing and maintenance of arms, or training for the vocation of the military. However, many technical skills which are not arms related, some of which could be used in the conversion of technology to peace-time uses and to a fully disarmed world are also taught. It is to the credit of some institutions and some military educators that observations and analyses about these alternatives are sometimes, if very infrequently, made. It needs to be observed, too, that for many, especially the poor, the military is the only avenue to technical training.

A further obstacle in the vocational area applies to social learnings in general and not just to peace and disarmament in particular. Far too few vocational educational programs deal with the social need for and consequences of the skill being learned, nor how it fits into the total life pattern of a person, or what stage it represents in a life-long educational process. The only exceptions to this, for the most part, come into programs now being developed in alternative technologies and low-resource consumption industrial projects. These projects are often designed by persons who have a larger social vision, and who are motivated by a desire to achieve a society characterized by non-violence and social justice. In these cases, the societal needs for and consequences of alternative technologies and low-resource consumption industries and lifestyles are a basis for the vocational and technical training offered. We should also note, however, that there are some cases in which intermediate technology is seen as a step toward more "sophisticated" technology and to more highly resource consuming industries. Here is another issue of resource distribution and use. Much of our present vocational education is training people to participate in the large scale use of resources to maintain the arms system.

In those adult education programs classified as "enrichment" or in more direct terms, leisure or recreational, or even those classified as "continuing education," which may have some direct bearing on the way people live or make a living, there is little consideration, if any, of subjects which deal with global issues, and far fewer with peace education. The notable exception to this is the folk high schools in some Western European countries where courses on world problems or international relations are sometimes offered, and in a few continuing education programs in the United States, organized by the extension divisions of universities, where similar types of programs are offered.

Courses in the European folk high school, for example the Vasterhaninge Folk High School in Sweden, are, according to the objectives set forth for disarmament education, somewhat better than those in the United States. They tend to be more globally oriented, not so much within the narrow, traditional foreign policy perspective as American courses. They are often concerned with the inequities between the industrial and developing countries. In this sense it can be said they deal with the conditions necessary for peace. Most do not, however, confront directly such causes of war as the arms race, nor do they examine in detail the effects of military spending on the development process. While folk high schools have taken some steps forward, they still have a long way to go to truly fulfill the objectives of disarmament education.

Further, such courses, for the most part, are attended by persons who are already motivated by a desire for peace and are concerned with human rights. These are persons who simply wish to educate themselves more about the possibilities and the problems. Individuals who are not yet aware of the severity of the problem, those who might be most in need of such education, rarely, if ever, elect to take such courses. This implies a failure of the adult education programs to offer adequate guidance to students about societal needs in their program selection, and a lack of imagination in creating courses which can be presented in such a way that they would be intrinsically interesting in and of themselves to persons who might not already be motivated by a concern about the arms race and prospects for peace. Both this failure in guidance and the lack of imagination in course creation are serious obstacles to adequate adult education about disarmament,

Lifelong learning is becoming a more significant part of educational programming and development in most countries of the world. It is crucial that the role of peace and disarmament in such educational programs be reviewed and adequate attention given to the development of appropriate curricula and programs. Citizenship "re-education" of adults should be as widespread as citizenship education is for adolescents.

The ultimate responsibility of the lack of attention to disarmament, however, lies not within the educational systems or programs themselves, but in political leadership, in the major influences on public attitudes and the main sources of public information, namely governments and the media.

3.7 Obstacles in the Media and among Political Leaders

A recent article in The New York Times (February 7, 1977) pointed out that among a few areas which even the most critical television programs in the United States dared not touch was the "defense establishment." For the most part, the military in most countries is considered above criticism, in that the security of the nation depends on it, and it is a symbol of the strength and identity of the nation. This circumstance, combined with the previously mentioned attitudes of acceptance of military authority and the highly conflictual world situation in which the military is viewed as absolutely essential to the well-being of the nation, makes it extremely difficult in almost all countries for the media to question defense policies or the role of military in any depth. The few exceptions are countries which have already reviewed the need for large-scale arms production and a major military establishment, and as a consequence, reduced the military in favor of social expenditures. (See Ruth Sivard, ed. World Military and Social Expenditures, 1977).[12] Various aspects of militarism, its relationship to the arms race and human rights, have been explored by members of the International Peace Research Association. This work should certainly be brought to the attention of the media. (Note: IPRA has also prepared extensive bibliographies on arms and militarism.)

In addition reflecting a supportive attitude toward arms and the military, the media tend to play up the conflictual, competitive and aggressive aspects of the contemporary world. For instance, many analysts believe that the current concern in the United States over the so-called Soviet arms build-up is a consequence of a kind of sensational reporting about the situation. Such sensational reporting, consists of a certain degree of exaggeration and misinterpretation, as well as faulty comparison between the Soviet and American arms potential. (For instance, the Soviets do not "phase out" or get rid of obsolete weapons as does the U.S., and these old weapons are counted in the comparative figures.) It is pointed out, even, by some of our less peace-oriented leaders, in spite of the reports of the press and the implications thereof, that "superiority" in weaponry is virtually impossible within the highly sophisticated overkill system that the nuclear powers have developed. Yet the means of reporting, and the attitude of the media make it very difficult for the public to comprehend that security through superiority is impossible. Thus they continue to fear the greater weapons capacity of an opponent or enemy, and to support "catching up" in the arms race, with greater and greater resource expenditure on arms development. Many believe that in addition to not having sufficient concern nor providing enlightenment, the media are also subject to stronger influences from the "military-industrial establishment," than from other sectors of the society. Since this sector, which is dependent for its advantaged position on the production of weaponry, and the public attitudes which encourage such production, it is believed that they use their considerable influence and public relations resources, to encourage a belief in the need for more weapons as the only means to security, and to counter any of the more cogent arguments for arms control or limitation and most especially to discredit the idea of disarmament.

Although there have been some documentary reports on such things as cost overruns which point out the extreme lack of efficiency and wastefulness of military production and development, it has been extremely difficult for persons concerned with disarmament, or the development of peaceful dispute settlement mechanisms to gain attention for their ideas and for the policies they advocate in any of the media, except those few journals and public service programs which are particularly devoted to reform movements and peace. Unfortunately, these particular media do not reach a wide general audience. In general, the press does not report on the success of non-violent tactics, or of progress in mediation and conciliation, nor in general of cooperative events, claiming that the public is not interested in such events, that people are more likely to read about or watch presentations on violence and threats than on conciliation and accommodation. This clearly is a problem which must concern educators, particularly those who are now involved in what is called "consumer" education. If we view students as a group of consumers of the media, then we as educators must help them to become more demanding of alternatives to the present diet of violence and conflict which the media offers.

Political leadership may be even more culpable than the media in that we assume political leaders have access to a broader range of information, even "classified" and/or "strategic" information, and can call upon a wide variety of expertise, including peace researchers and persons experienced in non-violent conflict resolution. Some leaders, for very obvious reasons, for example those in the growing number of military states, do not want to raise alternative possibilities for public consideration as their leadership depends upon military support, not for the defense of the nation, but to keep them in power by restraining their own citizens from turning them out of office. But even in the so-called "free world," in representative democracies, leaders have not exercised any strong sense of responsibility to inform the public in adequate detail about the costs and dangers of the arms system, or about the possibility of alternatives to arms, and the potential positive consequences of disarmament. For example, very few leaders advocate the expenditure of public funds on conversion research, very few public leaders openly admit to a belief that general and complete disarmament as a means to achieve a peace system is at all possible within our lifetime. Yet, very often in ways that are reported to the public at large, these same leaders indicate that they fear whether we will be able to live out our lifetime as a consequence of the risks of nuclear exchange and the escalation of warfare. Only a minor segment of the general public has demanded that leadership address itself to these issues. It would seem that leaders do not trust the public on security questions. Such mistrust is, as well, accepted by the public itself, having been convinced that the technical and political issues are beyond their level of comprehension, all the while forgetting that most political leaders are, in fact, no more "expert" than they are, but simply that they have access to more information. The problem becomes one of having the public demand facts on the arms issues and insist that they be better informed of consequences of and alternatives to the arms race.

There is certainly evidence that the concern of the small segment of the public already informed is intensifying and that the numbers of concerned are slowly and surely growing. This phenomenon will be reported on in the assessment of the current status of disarmament education. One issue to which this segment of the population needs to address itself by way of educating its fellow citizens is the claim that real progress toward general and complete disarmament cannot be made, or such steps cannot be prudently considered, while we are pursuing limited arms control negotiations, that the arms control negotiations could in fact be impeded by efforts toward general and complete disarmament. Indeed, this indicates how crucial is the need for general systems education and information on the part of the public, who must be educated to conceive of long-range goals, to measure the efficacy of short-range steps in terms of the achievement of those goals and to understand wherein such short-range measures may in fact contribute to or impede the achievement of a peace system.

In sum, the most serious obstacles imposed by leadership is its failure to elaborate for the public the concept of general and complete disarmament, and to present it as one option to be pursued within the realm of arms policy.

4. The Present Status of Disarmament Education

4.1 General

As we have indicated in our overview of obstacles to disarmament education, the general state of education about the arms race, the war system, alternatives to the war system, the concepts and proposals for and potential consequences of disarmament is extremely limited. Even within the growing and highly professional field of peace education, there is still inadequate attention to the substance of the arms and alternative security systems questions. This circumstance was validated by the previously mentioned survey of peace educators. Although this survey is still incomplete, something over 30 responses from 8 different countries indicated that there is little or no material on the subject in use in the schools, and there is very limited material even available to schools should they intend to initiate programs on education about disarmament. This is not to say that there is not a great volume of material on disarmament as such, but to note that most of it is unsuitable for education of the general public, or within school settings, and further to note that educators, even those concerned with the area of peace, are not very familiar with even those materials which could be adapted for school use.

This lack of familiarity with sources and limited substantive knowledge on the part of peace educators is one of the most serious problems in the field, and is probably most responsible for the small volume of curriculum material and teaching programs on the subject. It is the opinion of the author of this study that this condition is due to the previously mentioned circumstance of the overemphasis on the technical aspects of disarmament on the part of both scholars and politicians, as well as the reluctance of politicians to state the political issues in simple, manageable terms, especially in general system terms or terms of alternatives and possibilities for change. Thus, the general status of disarmament education is to be diagnosed from the political as well as the pedagogical perspective. In dealing with any issues of social education or world politics, even within the supposedly objective environment of study and inquiry in schools and universities, we must acknowledge that the subjects are primarily political and, therefore, most subject to the constraints of the political climate. The subjects of peace and disarmament cannot be addressed in the same manner as other problems of education such as those of literacy or the sciences. Thus, the lack of widespread political support for programs in peace education, as well as the lack of consciousness about peace education and disarmament education as essentially political education, have reinforced each other in a way which has served to impede the development of the field. There needs to be a systematic effort to raise consciousness among educators about these issues. Further observations on this question will be made in the section on recommendations.

Yet, in spite of this extremely sensitive, political overtone to the field, and the many obstacles previously described, there is a good deal of educational development which forms a basis for and can be functionally related to disarmament education. There are currently under development many programs in various parts of the world which deal particularly with the attitudinal and global systems obstacles to disarmament education that were previously described in this study. These programs fall within the spheres of peace education and global education which are closely related, but not synonymous fields.

Global education has as its general objective the achievement of what is now coming to be called "global literacy." Global literacy is a summary term to indicate awareness about the interdependent nature of the planet earth and the peoples of the planet and of global problems. (See Robert Hanvey, Toward An Attainable Global Perspective.)[13] Most widely attended to among these problems are population, ecology, poverty and conflict. It should be noted, however, that it is the phenomenon of conflict and not the war system nor the issue of arms policy which informs that study. In many cases, it is possible for such programs to study conflict without ever addressing the questions of war and the arms race and the potential consequences of disarmament. Some global education still purports to be value-free in the sense that social education based on the social sciences has attempted in the past to be value-free. Yet as social education in most countries inculcates a loyalty to the particular nation planning and providing the education, there is an implicit loyalty to the human species and to the planet as the home of the species which underlies the global education movement.

Peace education, (See Susan Carpenter et al, Creating the Future.)[14] on the other hand, is for the most part an explicitly value-oriented and normative form of study, in that peace is expressed as a value closely interrelated with the values of human rights. In most cases, the inquiries of peace education acknowledge as their purpose the development of knowledge which will help to achieve peace and justice, moving beyond the awareness of global problems, at which most global education stops, toward the normative resolution of the problems. Thus peace education is distinct from global education in two ways: it examines values and explores global systems in terms of their relationship to the values of peace and justice and it explores both the normative and the structural causes of the problems as well as a variety of alternative solutions. It is important to note that responsible peace education does not advocate specific modes for the achievement of peace or human rights, but inquires into a variety of them, leaving it to the students to decide for themselves which are the most desirable and potentially effective. Even with this explicit normative purpose, the question of the arms system as such is not yet widely explored even within peace studies. However, many questions which relate to attitudes towards arms and the military are raised by most peace education programs and form a part of them at all levels of education, from early childhood through graduate school and continuing education. Thus peace education in its present status is a basis for and a take-off point for education about disarmament and its potential consequences, but it is not yet synonymous with disarmament education.

4.2 The Status of Education for Disarmament at the Elementary Level

If we assume a more critical attitude toward the necessity for force and an inquisitive attitude toward alternatives to violence and arms as prerequisites for effective learning about disarmament, then many of the present programs in peace education are providing just such a basis. At the elementary school level, much is now being done by way of attitude and value formation and the encouragement of cooperative, supportive behaviors which it is believed will create an open-mindedness to substantive study of the issues at more advanced levels of education.

For the most part, at least in the United States and some European countries, these programs are conducted either in independent, private schools, religious schools, or in public schools with the assistance of outside and/or private agencies, such as the World Studies Project in Britain.[15] Another such example is the Quaker Conflict Project now operating in a number of cities in the United States. This particular project, through the use of stories, puppetry, roleplaying and games, teaches children something about the nature of conflict and how it escalates. It teaches them about threat systems and the potential consequences of escalating conflict through the threat and use of force. From games which illustrate these phenomena, children are led to discuss their own behavior and to observe the way in which conflict arises among and between themselves, and how those conflicts have the potential to avoid violence as well as to become violent. Although most of this is done within the affective area of education, a good deal of cognitive learning also takes place in that children, although they are not given the explicit terminology, learn about the process of conflict and conflict resolution, and the idea of alternatives to violence. By the time youngsters are nine or ten years old, such programs have helped them to understand the desirability of having a number of options open when one is in conflict, and that the larger the repertoire of non-violent options and conflict management skills, the less likely is the outbreak of violence, a most important lesson to learn for a generation we hope will be able to build a disarmed world political system. Programs similar to this are also under development in western countries, most notable West Germany where a transnational project for early childhood peace education is being developed under the auspices of the World Council for Curriculum and Instruction.

Another important aspect of peace education at the elementary level which can be a significant basis for the development of disarmament education, is the emphasis on self-value and positive self concept. Research has indicated that violent behavior and aggression toward others is frequently the result of lack of satisfaction with or devaluing of self, whether that self-devaluation comes from feedback from the society, the school, family, or friends, or is self-generated, it has frequently been found to be the precursor to destructive behavior, often self-destructive, but equally as often aggressive toward and destructive of others and their rights. Thus, in many parts of the world, early childhood education tries to help children to gain a sense of their own identity within their families, within their cultures, and as members of the entire human family. The intention of such education is to create a sense of loyalty and identification with the human species, so that the commonalities among and the common destiny of the Earth's peoples can be better understood, forming a basis for programs which attempt to analyze the common problems of humanity at later points in the educational scheme.

The most significant efforts at teaching for the development of positive self-concept are being taken in the training of teachers to give positive feedback to students and in preparing them to interact with students in a way which will help children to come to know and value themselves. This particular aspect of peace education is especially important in former colonial areas, where adults frequently have internalized attitudes of inferiority as a consequence of the position of their nation and people in the world power structure. In the "poverty pockets" of the imperial powers of the so-called "First World" nations, where members of minority cultures, as a result of their own exploitation, have frequently internalized some of the same attitudes, there is some evidence that the internalization of these attitudes has created both societal violence and individual violence such as crime and drug addiction. Peace educators sometimes see parallels in the kind of human dignity and positive self-image education which must take place among exploited and oppressed cultural minorities within one dominant culture, and among exploited and oppressed cultural majorities among former colonial peoples.

Parallel to this development of a positive self-image and self-value which seems to be an essential prerequisite for commitment to non-violence, is the attempt to develop respect and value for others who are different racially, culturally, ideologically from oneself, and to develop the attitude that difference does not necessarily carry with it threat to one's own identity, well-being or survival. Some programs now are trying to acquaint students with the many different physical appearances that humans have. Such programs try to teach children to appreciate and cherish diversity, and to kindle in them a desire to preserve diversity. They also try to teach children to understand that diversity provides not only enrichment and pleasure but sometimes causes controversy and conflict. However, even the controversy and conflict need not necessarily be negative and destructive. New alternatives, new modes of dealing with problems might be developed if conflicts could be resolved creatively, without destruction and violence. In terms of the specifics of such programs, students are taught that they can differ without denegrating their opponents. Techniques to explore feelings and play out conflicts are being used in many classrooms.

Especially productive are programs which teach children about different cultures and different races by looking at experiences which they themselves have had and are familiar with, seeing those experiences through the eyes of another culture, making that culture less strange and more interesting. Some exciting things have been done in certain schools in the United States which were caught in profound racial conflict, and there is an effort on the part of one of these programs to relate the principles of cross cultural understanding, conflict resolution and basic human rights which form the core of the study of the American problem to the global level. The children in these schools also learn about the heroes and heroines of non-violent struggles for justice such as Ghandi, Luthuli, Martin Luther King and Fannie Lou Hammer. They also begin their study of cultural difference with a review of human commonalities and a detailed study of the Universal Declaration of Human Rights.[17]

4.3 The Status of Education for Disarmament at the Secondary Level

When considered within the entire range of social education programs at the secondary level, peace education in general and disarmament education in particular, is only a miniscule part of most programs. Although in some systems there is an articulation of the desire and need for world peace evident throughout formal education, there is in most countries little or no substantive study of the issues and problems of peace and even less of disarmament. However, there is more being done in secondary education than at any other level of formal schooling, indeed more than the reviewer expected to find when undertaking the preliminary study.

Most of the education which relates to disarmament at the secondary level is done within the context of peace studies or, what we have come to define as "global community studies." Global community studies differs somewhat from global education in that they share with peace education a degree of normative explicitness. That is, they acknowledge that the problems to be overcome are war, poverty, injustice, ecological deterioration, and that the purpose of the study is to find solutions or alternatives to the present conditions, not simply to understand them. The "community" aspect indicates that all actors have a responsibility to the system and to each other, as well as a right to share equally in the benefits of the system, and a responsibility not to violate the rights of other actors. Thus, although global community studies is broader than peace studies and less explicitly concerned with war itself, they are, like peace education, based on certain value assumptions, one of which is that force and violence should be unacceptable in the world political system. One of the major purposes of these studies is to produce knowledge which will contribute to the elimination of violence.

There are also some courses at the secondary level called "world order studies" following the definition of that discipline put forth by the Institute for World Order, which developed a specific method of inquiry, based on the proposal and evaluation of a variety of alternatives to the present international system, designed to achieve a number of value goals including complete and general disarmament. Courses in this latter subject area were reported only from the United States. The most notable example is that which is given at Melbourne High School in Melbourne, Florida. This course inaugurated in 1963 has been a model for a number of similar courses given in other parts of the country. Unfortunately, there has been of late a slight decline in the number of world order courses, because these courses were given as electives or supplementary to requirements in social studies departments. The economic difficulties which have resulted in program cuts have frequently resulted in the cutting of world order courses, and also the dropping of other forms of global education. Some teachers in the United States have managed, even though these courses have been cut, to cover issues of war and peace and arms control and disarmament within the context of other courses. One course which offers significant possibilities for this is American History in which some teachers devote a significant portion of time to covering the history of American participation in disarmament conferences and arms negotiations. In fact, the author suspects that there might be more secondary school students than adult citizens of the United States who are familiar with the history of disarmament efforts.

Within the context of a global community perspective, an interesting course is given at Stanstead College in Canada, a boys' boarding secondary school. In this course the arms race and the potential consequences of economic conversion are studied in more detail than in any other course reported in the survey. The syllabus and materials for this course could be adapted to a number of English-speaking countries, but the issues are definitely presented from the perspective of the industrial nations. So were, in fact, all of the reported units and courses which dealt substantively with peace and disarmament. Indeed, in taking an overview of activity in the disarmament movement, and peace education as such, it is evident that the preoccupation with the dangers of the arms race is greater in the arms selling and producing nations. Though very little information was obtained from developing countries, that which did come in indicated that arms and security issues and peacekeeping and conflict resolution as such are not given much attention, even in peace studies programs. The underlying assumption of most programs reported was that the root of the problem is in the nuclear power nations, and must be dealt with by those nations more than others.

One reason why activity at the secondary level may be more extensive than at other levels is that the pedagogical options are more varied, and the types of materials and methods which can be adapted to the issues are of a much broader range than are used at either the elementary or the university level--the elementary being limited by the lack of certain skills on the part of young children as well as by the level of their cognitive development, and the universities being limited by a very traditional approach of readings and lectures, with only few exceptions where some use is made of simulations. The range of materials and methods used in secondary schools to teach about arms policy and the security systems extends from readings, to films, to sound-filmstrips, to values analysis exercises, decision-making games, and full-scale simulations of armed conflict situations and disarmament systems. In some cases students are even invited to plan their own preferred system for a disarmed world based on a variety of criteria including workability of the system itself and the possibilities for its being accepted by the various nations of the world. This technique, called model-building, is also applied to other global problems such as human rights, environmental questions, and seems to hold the possibility of developing not only creative imagination but also practical problem-solving skills which are generally conceded to be essential to the attainment of a disarmed world, or even to reducing the dependence on arms for maintaining security in the present system.

Special comment should be made about more particular learning materials, citations for which appear in the bibliography. Unfortunately, from the perspective of global efforts in the field, most of these materials were produced within the United States, and have their widest use in that country, although a few other English-speaking countries, and countries wherein English is a second working language, have occasionally made use of them. (Note: The bibliography, however, also includes materials from various countries.)

Among these materials are a simulation game entitled, "Conflict," which is based on a model disarmament system described by Arthur Waskow in a booklet called Keeping the World Disarmed. This particular game provides students with a simulated experience in working through a very acute international conflict that could arise in a disarmed world. More than any other single device, it helps students to understand that a warless world would as likely be a conflictual world as is the present one, but that such conflict can be managed by institutions specifically planned to avoid warfare and violence, and that the maintenance of such institutions depends upon the commitment of persons and governments to the preservation of a non-violent global social order, or at least one in which force and violence is reduced to the very minimum necessary to maintain order and defend fundamental human rights. Such learnings are absolutely essential to the preparation of citizens to develop and support disarmament and world institutions to maintain it.

A material which many teachers have pointed out as highly instructive and motivating, even though it is disturbing, is a sound-filmstrip entitled, "The Age of Megaton." This sound-filmstrip reviews the history of the development and testing of nuclear weapons and considers the consequences of their use. Students seem to react to it in a way which pleases teachers interested in creating an understanding of the arms race, that is with surprise and concern. Through this reaction they reflect the attitudes of a public now demonstrating increased concern over these issues. They have known little or nothing of what was involved, either technically, politically, or ethically in the development of nuclear weaponry. As the facts were revealed there is a reaction of shock. The concepts are presented in a way which is manageable for classroom discussion, and permits teachers to help students to understand that decisions about arms are made as are other public decisions and are not subject to some uncontrollable dynamic which human reason cannot effect. It might also be noted that teachers interested in this subject prefer this particular sound-filmstrip to some of the films which outline, in most graphic detail, the consequences of the Hiroshima-Nagasaki explosions. While these films disturb and frighten and may provide some impetus to do something about the arms race and the achievement of disarmament, most do not reflect upon the decision-making process nor do they offer suggestions for alternative, curative actions.

A third material which has begun to have very wide use in secondary schools in the United States, and has received considerable attention from educators in other parts of the world, is a booklet entitled "World Military and Social Expenditures."[18] This booklet compares the amounts of public expenditures made by the governments of the world for arms and the military and what they expend for various social services and purposes such as health and education. It provides teachers with a sound data base for initiating discussion on the economic consequences of the arms race, and the potential consequences of economic conversion, and also offers a factual basis for the analysis of the values and purposes of the present international system and the nation-states which are involved in it. Two prototype lessons, one for junior high school and one for senior high school, based upon the use of this particular material, are included in the annex and listings of "The Age of Megaton" and "Conflict " are in the bibliography.

There are, indeed, many possibilities for extensive and constructive education about the arms race at the secondary level. It should be noted, however, that the implementation of such possibilities are inhibited, probably by the same two obstacles which inhibit general discussion about disarmament.

Schools are hesitant to take up politically sensitive issues. Indeed, the political sensitivity of the issue even effects certain international conferences which are supposedly intended to work on educational programs for peace and disarmament, wherein most of the time is spent on general discussion of the process of innovation, without specific reference to the substance of peace or disarmament. At such conferences more attention is paid to cultural and attitudinal aspects of international understanding than to education required to understand the structural and political questions related to the achievement of disarmament and the enforcement of human rights. Secondly, the technical nature of the problem makes even those teachers who have acquired some mastery of it themselves hesitant to raise it in their classrooms, because most material available on the subjects of arms control and disarmament are so highly technical. It was for this latter reason that "World Military and Social Expenditures" was greeted with such enthusiasm by peace educators.

4.4 The Status of Disarmament Education at the University Level

At the university level, education about arms policy usually falls within three general spheres: strategic studies, international relations and/or world politics, and peace studies. In addition to these three general categories, there is a growing interest within departments of economics on the economic aspects and consequences of the arms race. An example is the course on "The Permanent War Economy" at Columbia University in New York City. This particular interest is expressed primarily by educators who have some personal, normative concern about social deterioration in the industrialized world resulting from execessive resource expenditure on arms, and from the limitation such expenditures places on the development of the poorer parts of the world.[19] One of the important consequences of this concern is more economists moving into the general field of peace studies while maintaining their academic posts within the departments of economics. We might also note that in the United States this has occurred in other disciplines such as philosophy, psychology, and political science, as well as religion, particularly in religiously based schools. However, none of these aforementioned disciplines give attention to the arms control disarmament questions in standard courses.

Documented evidence on the extent of strategic studies, by which I mean study of and inquiry into problems of defense and security from a military perspective, was not available to the author. But it is generally known that research in this area has been conducted in universities, at least universities in the United States, for the most part under government grants but sometimes with foundation support as well. This research penetrates the educational process by the involvement of graduate students and sometimes by the presentation of non-classified research findings or proposals within classes and seminars at universities. Such research seems to have two opposite purposes. One is the further development of expertise in weaponry and the technical efficiency of weaponry along with strategic planning for the most effective use of these developments within world politics. These kinds of inquiries are what most people understand as strategic studies. On the other hand, under the title of strategic studies, there are some programs directed specifically at strategies and techniques for arms limitation, and indeed sometimes at alternatives to arms for defense and conflict purposes. Most notable among the latter is not only the field of non-violent studies, which has given some highly technical and sophisticated attention to this issue, but also the field of "transarmament," a concept defined by the scholar Gene Sharp, which is gaining wider and wider acceptance within the peace studies field in the universities and has been reviewed by governments such as the Netherlands.[20] Most notable among universities which carry out strategic studies are probably those in Britain, such as Sussex, and the Institute for Strategic Studies in London, which has on its staff scholars from universities. Anecdotal evidence indicates that similar programs also exist in Germany and in France. There is academic interest in the subject in other European countries, whether or not this actually influences the educational programs of the universities is uncertain.

Further, it should be noted that special institutes for research and investigation on arms subjects, while not necessarily within the structure of a given university, have profound effect on what occurs in universities in two ways. They are largely staffed by academics, and the results of their research, when not classified for security reasons, often becomes the substance of seminars. Very notable among such

Institutes is the Swedish International Peace Research Institute which has almost exclusively concentrated on the arms problem and contributed some of the most relevant data to understanding the true nature of the threat of arms production and the statistical likelihood of the use of nuclear weapons (see SIPRI report issued in January 1977).[21] Such researches form the second data base which is necessary for the development of responsible, effective curriculum materials for both the university and the secondary level, and which should be more widely used than they are, in general public education endeavors at the adult level.

Among university projects, particularly devoted to the study of arms control and disarmament, are those in the United States recently funded by the Ford Foundation at Stanford, Harvard, Cornell, UCLA, MIT, Pittsburgh and Indiana. What is perhaps most significant about this particular set of programs is that they constitute evidence of real concern on the part of a respected foundation within the American establishment, for a significant amount of funds were allocated to the project.

Another notable program exists at the University of British Columbia, Vancouver, Canada, which counts among its scholars, for example, Leonard Marsh and William Epstein who have long been active in this field. Epstein is an example of the kind of personnel that function in this field, and lamentably, the small number of persons who are completely devoted at an academic level to the subject. In addition to his work at Vancouver, he is also associated with UNITAR, and does work at the Institute for Strategic Studies. This can be viewed as advantageous in that there is a growing transnational cadre of scholars concerned with arms control and disarmament. Yet it can also be viewed negatively in that to date it is only a small cadre and not a widespread network of scholars affecting the majority of research institutions and universities.

It is in the area of international relations and world politics that the greatest opportunity exists for university education on arms control and disarmament issues. From the perspective of those educators who believe that such education should be an inquiry into the openly acknowledged goal of achieving disarmament, this area is currently a disappointment, for it is even less normatively concerned than is global education at the secondary school level. International relations as a discipline has for the most part perpetuated the ethic of power politics and the concept of the balance of power. It has been pointed out by some scholars that this concept was a response to a "naked power" approach to world politics, but nonetheless, this school of thought has not encouraged the search for alternatives, and has turned out a group of university educated people who assume that the power structure of competitive nation-states is an unchangeable given of world affairs. Nevertheless, there are in this field, too, a number of scholars and educators concerned about the dangers of the arms race, and studies about the history of the arms control and disarmament movement take place in a few international relations courses, as well as in history courses. Courses and seminars explicitly related to these subjects are infrequent. The subjects are in almost all cases likely to come up within the context of other subject areas or themes.

As with the other levels of education, it is in the field of peace studies that the most significant university work relating to arms control, disarmament and the consequences of the arms race and potential consequences of disarmament are to be found. Although peace research itself is at this point a discipline which exists throughout the world, probably more vigorous in Europe than in North America, and slowly but surely growing in the so-called "Third World" or "developing countries," peace studies where the emphasis is as much on education as on research seems to be most highly developed in North America. The North American affiliate of the International Peace Research Association, (IPRA was founded at Groenigen, Holland in 1968 and now has its Secretariat at the Institute for Peace Research, Tampere, Finland.), the Consortium on Peace Research, Education and Development, (COPRED was founded at the University of Colorado in 1972 and now has its Secretariat at Gustavus Adolphus College, St. Peter, Minnesota.), has as its largest percentage of membership, university educators who are involved in peace studies either within the traditional disciplines or in specific peace studies programs.

Peace studies are rapidly growing in universities throughout the United States. This is made evident by the large number of inquiries that come to such organizations as COPRED, the Institute for World Order, and the National Peace

Academy Campaign, and by the excellent attendance at events organized by these agencies to present peace studies approaches and programs to a university audience. What this rapid growth means is extremely significant, because it has not occurred without struggle. Peace studies have had two severe obstacles to overcome in order to establish themselves in the universities. First, as a non-traditional discipline, it has been necessary for the advocates and practitioners of peace studies to establish to the satisfaction of their colleagues, most especially curriculum committees, that peace studies are a responsible academic pursuit, based on sound scientific research and study. Peace studies are taught not only through traditional pedagogic methods but by a variety of widely admired, innovative learning techniques which are applicable in any area of the social sciences. It is important to take note of the pedagogical aspects of peace studies because the willingness of peace studies educators to experiment with methods other than lecture, were in large part responsible for the support peace studies programs received from students. Indeed, it might be noted that on any number of campuses, such programs were started by the insistence of students who themselves undertook to research and plan curriculum when this was not done by faculty. Such actions indicate the acute anxiety among young people about the arms race and the potential for war, and also their faith in the problem solving capacity of the university. Some programs, which were begun under student initiative, are now among the outstanding academic programs of peace studies in the

United States, such as that at Colgate University in New York State.

Further, peace studies has had to contend with some political resistance on the part of persons, even within so "intellectual" an environment as universities, who believed that the study of peace was the advocacy of "peace at any price" and, therefore, tantamount to disloyalty to the state and/or the defenders of the state. Although this form of resistance in the universities was not so basic and simple in its line of argumentation as those which the radical right put forth against peace and global studies in the public schools, the consequences were very much the same, and the requirements they imposed upon university peace educators were similar. The peace educators had to present evidence that these studies could be pursued in an objective, responsible manner. They also had to clearly explain that "objectivity" and "neutrality" were not necessarily synonymous. This latter distinction is extremely important for the development of education for disarmament, and for the implementation of the 1974 UNESCO Recommendation. It is the opinion of this author that if this distinction were clearly articulated, many of the political obstacles confronting the resolution of basic issues of peace and human rights in international educational conferences could be overcome. In other words, delegates could address crucial questions without seeming to contradict or be disloyal to their own governments.

Finally, the need to organize and develop appropriate curricula for peace studies courses had to be met. In this endeavor much assistance came from such organizations as COPRED and IWO, and from various bulletins and journals put out by research institutes such as that at Tampere, Finland, publisher of *Instant Peace Research*, and the Peace Research Institute of Oslo, which publishes on behalf of the International Peace Research Association, *The Bulletin of Peace Proposals*, and the *Peace Research Abstracts* put out by the Canadian Peace Research Institute.

Yet in reviewing current resources for curriculum for university level peace studies, one sees once again the lamentable lack of emphasis on the arms issue. So far as the resources provided regularly by these publications is concerned, other than specific documents previously mentioned and those of SIPRI (which are not that widely available to peace educators), only the *Peace Research Abstracts* seem to have put constant emphasis on the arms issue as a component of curriculum. This is not to say that the research reported in the *Bulletin of Peace Proposals* has not been used, but simply that most of it has not been in a form readily enough transferable to university curricula.

In reviewing course offerings we find that although there are some excellent courses on arms control, for example, a newly established one at the University of California at Santa Cruz, (being taught by a professor on loan from Stanford), and the seminar at Colgate, inclusion of arms issues in courses on non-violence such as those given at the Manhattan College Peace Studies Institute, the study of arms and disarmament issues is not generally required of peace studies majors, nor are they yet essential components of all peace studies programs. It should be noted, however, that to some degree the question of disarmament is always touched upon indirectly, if not focused upon specifically, not only in peace studies, but also in courses and seminars dealing with peacekeeping and/or the United Nations.

Within the whole range of peace studies approaches world order studies probably more than any other approach focuses on political and structural aspects of achieving general and complete disarmament. This undoubtedly is due to the origin of the discipline, which was an attempt to study the abolition of war as an institution, and therefore carried a strong institutional bias, which demanded exploration of the question of disarmament. For example, one of the key materials in world order courses has been proposals for disarmament, including general and complete disarmament such as the Clark-Sohn proposal. One of the exercises presented by world order studies is the analysis, or comparison and evaluation of these proposals. (See McVitty 1964.)[22]

Since it is in the universities and colleges that teachers are trained and their professional formation determined, the lack of courses or even units on any global matters or on cross cultural studies is a shocking fact of the present status of disarmament education in teacher training. Most teachers go into teaching with little or no education in global affairs and none on disarmament. Teacher education in both the developed and developing world is construed in far too narrow a context for the social responsibility it bears. The formation of teachers tends to be to prepare them to support and perpetuate the social order and in many cases to display virtually "blind loyalty" to the state which employs them. They are not trained to be reflective or critical, and are, therefore, unable to prepare students to explore and develop ideas on alternatives to the present war system. Without significant change in this area, the schools will never be effective in educating for a disarmed world.

When reviewing the status of disarmament education at the university level, it is appropriate to note a number of transnational, scholarly efforts in the field. The Pugwash Conferences which first brought together Soviet and American scientists and later scholars from other nations to engage in scholarly discussions have been followed by several significant developments. One of them organized by the Italian Pugwash Group has become widely known by its acronym, ISCDARCC. The International School on Disarmament and Research on Conflicts brought together scholars and experts on the arms race to deliver lectures within the context of a course attended by university personnel. The sixth annual conference took place at the Instituto di Fisica, Universita degli Studi in Rome in 1976.

Other noteworthy efforts have been undertaken by the International Peace Research Association at its annual seminar at Vasterhaninge, Sweden, where the previously mentioned study on militarism was developed. The International Institute for Peace in Vienna, Austria has also organized scholarly discussions of the topics dealing with the development of a peace system. Some of these discussions have been published in their bulletin.

One final note on arms issues in the universities should be made in reference to the Vietnam War. The urgency of this situation led educators to emphasize exploration of more short-range questions of war and peace, and to some extent the author believes the lack of emphasis over the past ten years on the war system in general and the arms race specifically was due to the focus of attention on this particular war.

4.5 and 4.6 The Status of Disarmament Education in Non-Formal and Adult Education

Without doubt, the most extensive education to promote disarmament is being offered by non-governmental organizations, for the most part, in Japan, Europe, and the United States. It is understandable that these are the areas manifesting a great preoccupation with the arms race, and the possible consequences of the use of nuclear arms, in that they represent the major producers, as well as the one victim of the use of atomic weapons. If we accept that a major function of education is to encourage the acquisition of information, to facilitate reflection upon that information, and to capacitate action on conclusions drawn from the reflection, then clearly NGO's are the major educators in the disarmament field at the present moment. Local, national, and international non-governmental organizations in the areas previously mentioned, have been for a number of years pursuing intensive programs in discussion and education about arms issues, attempting to enlist the interest and concern of larger and larger numbers of the public. There is some evidence that they have succeeded in that some observers attribute to their efforts the decision of the 51st Session of the General Assembly of the United Nations on November 8, 1976, "to convene a special session of the General Assembly devoted to disarmament, to be held in New York in May/June of 1978."

Although some non-governmental organizations have had an interest in disarmament sustained over many years, it has been since 1974 that visibly heightened activity in the field has come to public notice. As previously mentioned, the Vietnam War diverted the interests of a number of peace groups from general and complete disarmament for some time. With the "winding down" of that conflict, peace organizations throughout the world began once again, to take up a special concern with general and complete disarmament, and other aspects of the proliferation and arms trade and testing problems. One of the first international events in this resurgence of interest in GCD (General and Complete Disarmament) was the Bradford Conference, held in England in September 1974. The participants representing a wide variety of NGO's concluded, and then propagated the Bradford Proposals calling for a world disarmament conference, and for a non-governmental conference six months prior to the official world conference.

In 1975, the New Stockholm Movement issued an appeal on the occasion of the 25th anniversary of the original Stockholm appeal calling for the banning of atomic weapons (March 19, 1950). This new appeal, stating that "Peace can be defended. A world of peace can be built." enumerates the threats to human existence and organized society stemming from the arms race. The World Peace Council, which issued the appeal, called for "a great new worldwide offensive against the arms race." The 1975 appeal, and the original 1950 appeal, are included in the annex of this report (annex #1), as is a copy of the Bradford Proposals (annex #2).

Another significant event which brought renewed attention to disarmament was the third theme of International Women's Year 1975, and one which promises to be continued through the International Women's Decade, (even though the primary emphasis of the decade is development) peace. The year, which had as its three themes "equality, development and peace," at first promised little or no concrete action in the latter field. However, women who had been involved both in the women's movement and peace movements understood the inter-relationship between peace and women's right to equality. Making quite clear their objection to the war system and the saber-rattling policies of a male-dominated political structure, they insisted on the inclusion of disarmament as one of the major sessions of the International Women's Year Tribune held simultaneously with the IWY World Conference in Mexico City in June 1975. From that session has stemmed many individual and group actions, largely undertaken through NGO's to educate women about the relationship of peace and disarmament to equal rights, particularly equality in public policy making.

Another strand of the movement calling for a world disarmament conference also developed at the Tribune. A petition begun there has been circulated throughout the world and has been signed by over 100,000 persons. In the process of gaining signatures, women in this campaign have engaged in educative discussions with many members of the public, bringing the issue to their attention in a way which it never has been addressed before. For example, one group of women, petitioning on the streets of New York, gave copies of the petition to persons who wished to continue the effort on their own. On the back of the petition were some simply stated principles about the need for and potential structure of a disarmed world. A copy of this petition, and the explanation, appears in the annex also (annex #3).

An example of individual non-governmental initiative, which happens to have stemmed from the IWY Tribune, is the formulation of the Committee for the International Women's Year/Decade, by two women in California. These women have organized a series of public meetings and academic panels at colleges in Northern California, which made it possible for the lay public to hear experts on the arms race, and to become better informed about some of the controversial issues involved in the pursuit of disarmament. A flyer for one such event at a college, and a report on the activities of this small committee, also appear in the annex (annexes #4a and 4b) as exemplars of the kind of educative work small, local organizations are doing in the field of education to promote disarmament among adults in non-formal as well as formal settings.

Two examples of the concern and energies of national organizations are seen in the public information campaign in Britain and in the response of one group of North American women religious to the questionnaire which was circulated to survey the current status of disarmament education. This group, which is called Network, provides information to other non-governmental organizations and citizen's groups, as well as to members of the executive and legislative branches of the United States government. It also provides an information base for many lobbying groups, and in the process, educates members of the government and interest groups. They are aggregating and disseminating literature and resources suitable to a general public. An example of the kind of information they make available is the bibliography listed in a letter from the group dated February 7, 1977 which appears in the annex to this report (annex #5).

In the United Kingdom, the Campaign Against the Arms Trade engages in the form of public education which is often initiated by demonstrations. However, these demonstrations are the occasion to call attention to the issue and to hand out pamphlets and information on the arms race and disarmament. Single copies of background papers which are available to the general public are on such subjects as arms transfers, arms and developing countries, government control of arms, exports, government arms sales, and they also provide fact sheets on the arms trade and cartoon posters. CAAT organized a public conference in September 1977.

Gensuikyo, the Japan Council against Atomic and Hydrogen Bombs is an organization that combines strong political action with public information. Members of this group have even visited U.N. headquarters in New York to lobby for disarmament. On these occasions they have joined with American peace activists in rallies at the U.N. entrance to demonstrate the rapidly growing "grassroots" movement in favor of disarmament. Similar groups are known to exist in other countries, but sufficient time to wait for their responses to the survey was not available.

Among international, non-governmental organizations very active in the disarmament field are the Women's International League for Peace and Freedom, the Young Women's Christian Association and the International Peace Bureau. The former was one of the groups which circulated and collected the petition initiated at the IWY Tribune. It also joined together with the International Women's Democratic Federation, which has its membership primarily in socialist countries, to hold a disarmament conference at the United Nations headquarters in New

York, as a special event of International Women's Year. This conference brought together over 300 women from approximately 60 countries, and was as the Tribune has been described, "a global consciousness-raising session" with special reference to the arms race and the requirements of peace. Follow-up conferences are being planned by these and other groups as a preliminary step to the special session of the General Assembly, with the purpose of educating the public to the issues which will be debated at the session, and helping them to form opinions and to bring some influence to bear on their own governments to take more definite steps toward reversing the arms race. In their international newsletter, "Pax et Libertas," Number 4, issued in December 1976, they reported on a disarmament questionnaire which is being circulated in several countries. A copy of the questionnaire as it appeared in the newsletter is included in the annex (annex #6). The questions are provocative in that they ask not only for opinions but raise some issues about institutional requirements for disarmament and conversion from military to peaceful production. The questions, in fact, provide the respondents with a general overview of some of the major issues in the arms field.

The YWCA has not only been active within individual countries, but also transnationally in the organization of a conference to work for a "Nuclear Free Pacific" initiated by the Executive Secretary of their branch in Fiji, Amelia Rokotuibuna.

PAX Cristi, a European organization with headquarters at the Hague, has also been internationally active in arguing from a Christian position for the cause of disarmament.

The International Peace Bureau has been active in distribution of the Bradford Proposals, and also in the organization of a number of educative events which focus attention on the 1978 Special Session and the need for a world disarmament conference. IPB is especially concerned with educating and enlisting the support of other non-governmental organizations, in the efforts to educate the general public and to persuade governments to move toward disarmament. They believe in a broad public discussion of the issue, as is stated in their circular letter of January 30, 1977, announcing the International Disarmament Relay program of events prior to the special session, wherein they state, "the question of disarmament, which affects ever increasing numbers of people, can only be dealt with if the peoples themselves take initiatives. Yet the impression still exists that disarmament is a problem so vast and complicated that it can be tackled only be experts. We wish to--we must--show that the problem is *comprehensible for everyone*. This, however, can only happen if we can *effectively inform public opinion* about all aspects of disarmament!" In this statement, the IPB has identified one of the major obstacles to disarmament education previously mentioned in this report, and has committed itself to significant efforts to overcome that obstacle. Among these projects is a unique educative project, the "Information Bus" which will travel through some of the largest cities in Finland, Sweden, Norway, The Federal Republic of Germany, Austria, and perhaps some Eastern European countries. The bus will carry information and persons to discuss disarmament issues with the general public.

These are but a few of the international non-governmental organizations working in the area of disarmament, with reference to presenting information to the public and policy makers. The proposals they have put forth, and the materials they have produced defining the issues and outlining the problems of progress in arms control and toward disarmament are potentially useful for transfer to a very wide public of adults through leaflets, monographs, visual presentations and the like. They can also be very useful as the basis for curriculum materials designed for use with elementary and secondary school students, particularly with the latter, and of course, in their existing form, in universities. It might be noted, for example, that the material previously mentioned as already in use at the secondary level, World Military and Social Expenditures, was produced under the sponsorship of three non-governmental organizations, The Arms Control Association, The Institute for World Order, and the Members of Congress for Peace Through Law Education Fund, all of whom are most interested in disarmament education, and bringing issues about the promotion of disarmament to a broad public.

Many of these organizations belong to the NGO Committee on Disarmament which meets regularly at the United Nations headquarters in New York and is a companion group to a similar committee which meets in Geneva. A list of the attendees at a fall 1977 meeting is included in the annex (annex #7) to provide an overview of the variety of organizations so involved. These groups were among the influences which led to the establishment in January 1977 of the U.N. Disarmament Centre. A number of them now form "the Enlarged Bureau" to coordinate NGO activities in relationship to the U.N. Eighth Special Session on disarmament, to assure citizen inputs.

It is also appropriate to note here the efforts being made to coordinate the educative activities of the academic sphere with those of the non-governmental organizations. Among them are efforts by IPRA and COPRED, the latter having organized from April 1977 to March 1978 a series of symposia in cooperation with various NGO's to prepare the public for the Special Session. (Programs for two of the symposia are attached as annexes #8a and 8b.)

4.7 The Status of Disarmament Education Among the Media and Political Leaders

Although most of what is relevant for this topic has already been stated in the section describing the obstacles to disarmament education posed by the media and political leaders, clearly these are crucial elements to be further considered in creating a climate for the achievement of disarmament, and for the implementation of any workable plans for a peace system. It would appear, therefore, that the flow of influence must be reversed; that is, that disarmament education must be directed as much at the media and political leaders as it is at student populations and the general public. In fact, one of the objectives of this education should be the capacitation of citizens to convince their leadership of the necessity and possibility for the achievement of disarmament, and the media of their potential positive role in helping all citizens to participate in the achievement of a peace system. Indeed, special effort should be made to ensure that section VII.38(b) of the 1974 Recommendation calling upon member states to assure a component of special mass media education for the selection and analysis of information presented by the mass media is carried out with a special focus on questions of arms, security, disarmament and peace.

5. Recommendations for Education to Promote Disarmament

The following recommendations are made for the purpose of developing educational programs that are likely 1) to promote support for general and complete disarmament, 2) to provide appropriate intellectual capacities for the planning and realization of a disarmed world, 3) to encourage attitudes of tolerance of ideological and political differences, appreciation of cultural and ethnic differences, 4) to develop skills of non-violent conflict resolution, and 5) to build commitment to a value system based upon fundamental human rights and the acknowledgement of the dignity and worth of every human person. In short, these recommendations are specific suggestions for carrying out the UNESCO Recommendation concerning Education for International Understanding, Cooperation and Peace, and Education relating to Human Rights and Fundamental Freedoms through the substance of disarmament.

5.1 Recommendations for Programs to be Undertaken by UNESCO for Education to Promote Disarmament

Before specific recommendations are offered, I should like to acknowledge the significance and genius of the UNESCO Recommendation. The significance is in its focus on two key concepts which are probably more crucial than any others to the survival of human society on this planet, namely, the assurance of fundamental human rights and the achievement of peace. The genius of the Recommendation is that they have been formulated and expressed in terms which permit the required basic political education to take place, without necessarily involving the possibility of political controversy. In the explanation of terms, section I, 1(b), the Recommendation by subsuming the terms of international understanding, cooperation and peace, under the comprehensive phrase of international education, at once creates a buffer against the certainty of political controversy, and acknowledges the basic purpose of all such education even though it goes under a variety of titles, the purpose being the achievement of peace and the assurance of human rights. Further, this definitional statement is not a denial of the differences among and between these approaches by claiming that they are synonymous. Thus the Recommendation makes a clear statement of purposes but acknowledges that there are a variety of modes which can be used toward their fulfillment. In the context of the Recommendation, therefore, UNESCO can play a most creative role in the further conceptualization and definition of areas of international education intended to achieve peace and assure human rights. It is toward the fulfillment of that role that the following recommendations are made.

5.1.1. It is recommended that UNESCO commission an inter-disciplinary, transnational body to draft for circulation and review, a statement defining the various approaches and current practices in international education, describing their methodology, and putting forth the basic political and pedagogic assumptions which underlie their programs. The purpose of such a statement would be to assess the variety of approaches and to investigate how this variety of resources might best be used by various educational actors committed to the purposes of the Recommendation, especially to disarmament education. Further, these approaches should be assessed in terms of the possibility of their contributing to effective education for the promotion of disarmament and human rights and for understanding the relationship between human rights and peace. It should be emphasized, however, that the purpose of the definitional draft is not to make a statement of UNESCO's preference for one approach over others, or even several over others, nor is it to synthesize all approaches into one standard or orthodox procedure. Rather, it is to fulfill the previous stated purposes, while attesting to the volume as well as to the variety of activity in the area of international education.

5.1.2. UNESCO should offer public recognition to the field of peace studies as a responsible discipline, of equal value with, although different from, other approaches to international education. This could be done by the organization of international symposia on peace studies, similar to those which UNI has supported in the area of peace research, and by reassuring that actual practitioners of peace studies per se are represented in all working sessions dealing with the 1974 Recommendation and with international education in general.

5.1.3. UNESCO should commission the development of a set of guidelines and criteria for education for the promotion of disarmament. These guidelines and criteria should be developed by a transnational group of educators, with particular expertise in peace studies and disarmament education.

5.1.4. UNESCO should prepare a handbook of teaching/learning practices on education for promotion of disarmament, with examples suitable to all educational levels and all learning environments, taken from a variety of cultures and political systems.

5.1.5. UNESCO should establish a program of research on appropriate practices in teacher education designed to fulfill the 1974 Recommendation VII.33 (a) through consideration of issues related to the promotion of disarmament. Such research should also explore ways in which the following Recommendation (b) on basic inter-disciplinary knowledge of world problems might be fulfilled in regard to the arms race, disarmament and human rights.

5.1.6. UNESCO should organize a series of international symposia on education for the promotion of disarmament, using as a basis for discussion the recommendations forthcoming from the research on teacher education and the exemplars presented in the handbook as well as the criteria and guidelines, and the survey described in section 5.1.1.

5.1.7. UNESCO should publicize possibilities for disarmament education as widely as possible among educators through their own publications and those of agencies and organizations with similar programs.

5.1.8. UNESCO should follow its current research on violence with the development of similar projects on alternatives to violence, with reference to the achievement of disarmament and human rights. In this regard, commendation should be made of the research on violence and structural violence, on the seminars co-sponsored by UNESCO on non-violent strategies for social change, and its general support of peace research.

5.1.9. UNESCO should organize a series of transnational workshops to develop skills and knowledge of education within the field of disarmament education.

5.1.10. Finally, and most strongly recommended, is that UNESCO should commission a broader and deeper study into the obstacles to and present practices in disarmament education, recognizing fully the limited nature of the present paper, and acknowledging the need for a more thorough data base for the fulfillment of all prior recommendations in this section. This study should be conducted by a transnational team with a research coordinator for each world region.

5.2 Recommendations for Member States for Education to Promote Disarmament

5.2.1. Member states should allocate a percentage of the resources designated for research and education to the field of disarmament, establishing within the government itself and promoting in universities, research into economic conversion from military to peaceful uses of technology and industry, the requirements of a political order based on non-violence, and the public attitudinal changes which will be necessary to achieve a disarmed world, and also into ways to teach about obstacles to disarmament and human rights and into ways to develop the means for their achievement.

5.2.2. Member states should set up commissions on international education with special sub-commissions on peace studies charged with developing programs for the promotion of disarmament and human rights suitable to the educational system and needs for each member state.

5.2.3. Member states in reporting to the UNESCO General Conference on activities to implement the Recommendation of 1974, should include specific reference to education for the promotion of disarmament and human rights.

5.3 Recommendations for Educational Agencies, Organizations and Projects

5.3.1. All educational agencies, organizations and projects dealing with citizenship education at any level should include within their program planning activities related to disarmament, peacekeeping, machinery for the enforcement of fundamental human rights, and any and all institutional requirements for the achievement and maintenance of a disarmed world.

5.3.2. Such agencies should assure that their personnel include persons with expertise in peace studies and education for disarmament and human rights. Such people might have taken part in the workshops mentioned in recommendation 5.1.8.

5.3.3. Agencies which provide funding to educational programs, research and innovations should allocate a specific percentage of those funds to disarmament education.

5.3.4. All educational agencies and organizations should distribute for discussion among their membership the UNESCO Recommendation of 1974, and when they are completed, the criteria and guidelines on education to promote disarmament and human rights. Reference to this existing document, and the proposed documents should be made in all journals published by such agencies, organizations, and most especially organizations comprised of practitioners of the educational professions.

5.4 Specific Suggestions for Various Learning Environments and Grade Levels

The following are specific suggestions for overcoming and to some extent going beyond the present obstacles to disarmament education. They are presented as suggestions to indicate what the author views as appropriate in view of her own views on the possibilities for and the purposes of disarmament education. The emphasis here is on some particular possibilities. chosen from the wide range of approaches noted in 5.1.1. It should also be noted that cognitive and affective aspects of this problem are deeply inter-related, but suggestions will be made in some cases giving special emphasis to one of the two domains. Further, it is suggested that definitions in Section 2 be reviewed, so that the meanings of the terms and the conceptual structures employed in this set of suggestions are quite clear to the reader. A re-reading also of the section on general obstacles in which some overall directions toward the desirable are also noted would be helpful in terms of the general objectives of disarmament education, as they are conceived by the author. Further, it should be noted that these suggestions relate equally to human rights as to disarmament.

5.4.1. Specific Suggestions for Disarmament Education at the Elementary Level

The major concern at the elementary level in education for the promotion of disarmament should be with attitudes and values. A positive attitude toward the possibility of changing world structures from the present predominantly violent conflict resolution procedures to non-violent processes which place primary value on the maintenance of life and human dignity is essential to the achievement of a peace system. If people do not believe that the achievement of a disarmed world is possible, it will not *be* possible. Attitudes about what is possible and desirable are frequently formed at early ages, thus, in elementary schools, children should be given lessons which point out the fact that human society is evolving and changing and that over the centuries social evolution has moved toward more integration and interdependence among peoples. This evolution has been accompanied by extension of the prohibition of the use of violence to ever larger and more varied groups of people, i.e., tribe to nation. When violence does occur within the recognized unit of interdependence, it is classified as criminal and aberrant. Humankind is struggling toward a stage of evolution in which war itself will be considered criminal and aberrant and all arms will be viewed as instruments of crime when they are used for purposes of destruction or for political purposes other than controlling criminal behavior within the society.

These are large yet farily simple concepts which can be communicated to young children through stories and pictures and very simple kinds of techniques. The specific historical facts need not be emphasized so much as the general pattern of human evolution in this positive direction. The details of the history of human social evolution toward ever larger units of interdependence and the consequent diminution of violence can be provided at the secondary level, when political structures and the means of controlling violence and organizing interdependence can be better comprehended by students.

Although young children need not necessarily be introduced to the actual text of the Universal Declaration of Human Rights (although a child's version has been prepared by the Center for the Study of War and Peace at Wayne State University in Detroit, Michigan[23]) they should at least know that this document, drafted and voted into being by so many different nations of the world, asserts that all human persons are valuable, that all human persons have the same rights, and that no person, no government, no power may be permitted to limit or violate those rights. The groundwork for the international solidarity called for by the 1974 Recommendation should be laid in the early years of education. Such groundwork consists not only in the development of respect for fundamental human rights and the knowledge that the international community is taking steps to defend them, but also in an understanding of the great diversity of cultures and lifestyles which make up the human society, among which the basic human solidarity must be formed. Thus, even in the first years of school, children can learn about other cultures, as well as their own. This can be done through games, films, photographs, stories, all of the things which attract children and from which the learnings can be applied to the task of creating intercultural understanding and respect for ethnic differences.

The spirit of solidarity can be re-inforced by specific skills of cooperation. Children could be taught many techniques for working in groups, particularly in groups where persons and ideas are diverse. Many peace education groups are currently developing cooperative games and a repertoire of skills of cooperation and peace-making is being built which could be internationally shared.[24]

Most important of all, children should come to understand in their elementary education, that conflict is a fact of human social experience, that it can be either productive or destructive, that it can contribute to the resolution of problems or to the creation of more problems. Whether it is productive and problem-solving or not will depend upon the skills and the modes with which each conflict is played out.

Therefore, techniques of non-violent conflict resolution from the simplest forms of resolving minor arguments between children through negotiating differences with parents, teachers, and other authority figures should be taught in elementary schools. No child should finish elementary education without understanding that there is a specific dynamic to conflict, that the escalation of conflict narrows the options for its resolution, and that the fundamental attitude toward the acceptability of violence will largely determine whether the conflict will be constructive or destructive. Most important of all, they must understand that conflict does not inevitably result in violence, that the use of violence is an act of human will. Neither is it inevitable that arms will always be necessary for the defense of the state, or that war will always be part of the human experience. Children should be taught that war, like slavery, is an institution which was invented by human society, and which can be abolished by human society, once we refuse to accept further the suffering imposed by that institution, declare it undesirable and no longer to be tolerated. In dealing with these concepts, the idea of heroes and heroines is one which is most appealing to students of younger years. They could be taught about persons who struggled to overcome slavery, as well as people who have devoted their lives to the struggle to end war, and about the many persons and groups who are working to promote disarmament and human rights.

Respect for human rights, an understanding of conflict and conflict resolution skills, and knowledge of the history of and potential for social change are all important components of education for the promotion of disarmament.

5.4.2. Specific Suggestions for the Secondary Level

The major objectives of education to promote disarmament at the secondary level should be to help students to understand the origins, functions, and purposes of the war system, and to be aware of efforts to overcome it and suggested alternatives to it. This particular systemic emphasis on war is suggested as a complement to the proposal to provide elementary school students with background on human social evolution emphasizing interdependence and cooperation. At the more mature level, students can be brought to understand why, as units grew larger, the competition among them sometimes grew more lethal, and that more sophisticated weaponry was developed as the areas of conflict and the severity of the conflicts became greater. They should also learn about the structures and procedures for peaceful conflict resolution developed to maintain order and provide justice in the larger units.

Secondary school students should know about the history of war in terms of its destruction of human values and human lives, as well as its distortion of the maturing process of human society and the major obstacle it poses to human rights. In general, the present practice of teaching about wars as means to attain positive goals should not be the only interpretation of war that students receive. This is not to advocate that wars of liberation, wars fought for the fulfillment of fundamental human rights should not be studied as such, but that students should know that the costs of such wars were very great, and that sometimes even those positive struggles were fought without careful analysis of other alternative strategies to achieve the human values for which a particular war was fought.

It is absolutely essential that young people preparing for active citizenship also have information about the costs of current military institutions and developments, and the possibilities for alternative expenditures of those resources on social purposes. Most especially, they should understand the erosion of human rights which occurs under militarism and the degree to which fundamental freedoms are crushed by the imperatives of national security which in our present war system are given priority over human values. (See IPRA study on militarism.)

They should know what the consequences of the use of weapons would be, particularly the consequences of nuclear weapons. Further, they should be provided with information on the ecological consequences of nuclear testing, on the political consequences of the arms trade, and why these practices are so widespread and apparently have the support of governments. They should also have information about attempts to limit the arms race, proposals and treaties for de-nuclearized zones, the history of arms limitation negotiations, the test ban treaty, the proposals for more comprehensive test ban agreements, and other arms control measures and proposals. They should be familiar with arguments for the maintenance of the arms race, for the limitation of arms, and for various forms of disarmament, as well as the arguments against those positions. They should be familiar with various proposals for the implementation of disarmament, particularly models for general and complete disarmament. In short, secondary education should provide people with enough basic information to make "value judgments and decisions on a rational analysis of relevant facts and factors" regarding the arms race and the possible alternatives to it. Such judgments and decisions can be made only if students have sufficient sophistication in values clarification and values analysis and in systems analysis. Learning units to provide these skills should be included at the secondary level.

Students in secondary schools could also be provided with education about the variety of non-violent strategies for social change, and the history of non-violent political movements. Non-violent techniques should always be included in instruction about forms of action to achieve political and social goals.

Secondary school education could also bring to a higher level of sophistication instruction about other cultures and political systems. Every graduate of secondary school should have some familiarity with a variety of cultures in detail sufficient for them to know of religious differences and similarities, economic differences, particularly inequities that cause conflict, and most importantly political structures and aspects of political institutions and beliefs which produce conflicts in the dangerously violence-prone world political systems.

Conflict studies might also be brought to a higher level of sophistication, giving them special relevance to social and political issues and problems at the national and international levels, with special reference to the major global issues and problems of the day which bear the seeds of conflict and the potential for warfare serving as causes of the arms race. Data analysis and the use of simulations to understand political processes and decision-making procedures could also be taught.

In sum, the major recommendation for secondary education is an infusion of the significant substantive aspects of peace studies into citizenship education in the curricula of all nations. Some specific materials currently used for these purposes are listed in the bibliography.

Although it may be less practical than the foregoing suggestions about education in an historical and present problem perspective, futuristics and the planning of alternative future world systems intended to end violence and assure human rights should be considered by those schools that have the fundamental capability to provide such education. It is, in fact, the contention of the author that future planning skills are a significant tool in policy making and as such a source of political power. If, therefore, a peaceful and just world is to be achieved using equity as a basic criteria, then this skill should be made available to more and more citizens.

Finally, although it has been treated as peripheral to most peace studies and global education, communication skills and languages are essential. If, for example, one reviews the history of disarmament negotiations and some of the misunderstandings and misinterpretations of words, such as "inspection," one sees how crucial communications are to the promotion of disarmament.[25] The current trend among global and peace educators to concern themselves more with the substance of what is communicated than the methods is one which they should try to overcome. Further, it should be noted that learning a language is the best key to understanding another culture, and is a tangible indication of the value one places on another culture.

5.4.3. Specific Suggestions for Disarmament Education at the University Level

Universities could become a very significant instrument for education to promote disarmament among their own staffs and students as well as the communities in which they are located. In fact, the universities could be a primary actor for disarmament education, not only in the formal settings of its own program offerings, but also in the non-formal setting as centers for learning in public fora. Specific suggestions for universities are made, therefore, within the context of their formal curricula and within their potential role as teachers of the public at large.

Universities might review their current course offerings in economics, political science, history, international relations, and peace studies to ensure that appropriate issues related to disarmament under each of those subjects is included within a minimum number of courses, so that any students selecting courses from those subjects would be assured of education about disarmament within the disciplines of their preference.

Universities might institute special seminars on arms control and disarmament. If necessary, these could be run on a special basis with visiting instructors from other universities, until such time as the pool of expertise is large enough to provide instruction in arms control and disarmament in all institutions.

Universities should review very carefully all of the research which occurs or is projected to occur under their auspices, to assure that if weapons research is conducted, at the very minimum there are also equal resources and faculty and scholar time given to arms control and disarmament research. All research projects related to arms and security subjects, no matter what the specific substance, should be conducted on a basis of open information. Research within universities should be considered part of the educational research base of the university, and students and faculty members should have access to the results of all research. This is important, not only in terms of assuring that the universities will no longer be component parts of the military establishments, but also to assure that the information which could contribute to the achievement of disarmament is made as widely available to students and citizens in general as is possible.

Universities could organize faculty-student symposia on issues related to arms control and disarmament for the purpose of assuring that these major public issues are thoroughly discussed in the university community, and to explore the possibilities for the institution of appropriate courses and seminars on the subject. (See program for Symposia at University of California, Santa Cruz, annex # 8a and at Manhattan College, annex #8b.)

Universities could be the sites of public lectures, fora, and symposia on arms control and disarmament, inviting to participate members of the public at large, and offering a platform to all shades of opinion on the arms and security question, both among scholars and activists. Public discussions among and between members of the "defense" establishment and members of the peace and disarmament movement could be mutually instructive to both and generally beneficial to the public as well as to the university community. No specific act of education, in the opinion of the author, can be as productive of education and public discussion on the subject as exchange between these two groups, and/or schools of thought.

Where possible, such fora and debates between the military and disarmament establishments should be recorded for radio broadcasts and telecast and an effort should be made to persuade the media to fulfill their responsibilities on these issues.

Further, public meetings, whether organized under the auspices of the media or of non-governmental organizations or of religious groups, could have as one of their functions the formulation of questions and suggestions to be forwarded to political leadership. A vital part of the process of education for disarmament should be a dialogue between citizens and leaders, so that leaders may become more clearly aware of the desires of the public, their anxieties and their growing belief in the need for substantive progress in the areas of arms control and disarmament. The universities in their role as creators and aggregators of socially relevant knowledge are a logical site for such public meetings. They must certainly begin to take more seriously their responsibility to produce the knowledge and train the experts needed to bring about a peace system.

Finally, institutions of higher education charged with the training of teachers shouldrecognize that the mentality and pedagogical skills of those who instruct the young are the most crucial factors in formal education. No educator should be sent into the schools without the basic preparation in peace studies and disarmament education. These might be required subjects in teacher education. Teachers preparing for service in elementary and secondary schools should be equipped to teach the subjects and develop the skills advocated in the sections on recommendations for elementary and secondary levels. This will in most cases require introduction of new courses into teacher training institutions at both the graduate and undergraduate levels. Further, massive efforts should be made in the in-service education of teachers now in the classrooms so that these subjects and methods can be introduced into all schools as rapidly as possible. Among the global networks of peace educators numbers of trainers exist who could make such in-service programs possible.

5.5 Recommendations for Non-Governmental Organizations and Adult Groups without Specific Educational or Political Purposes

The recommendations are made in this way because, as mentioned in Section 4, the work of non-governmental organizations which have basic political purposes is the most outstanding in the entire area of education for disarmament. The only recommendations to be made to these groups is to coordinate their endeavors so as to increase the combined impact and to make every effort to escalate the volume and scope of the educational activities they are now engaged in.

As for other non-governmental organizations and adult groups, steps could be taken to assure that all adults who belong to any clubs or any organizations would have opportunity to study the issues of arms control and disarmament. Hence the following recommendations:

5.5.1. Churches could set aside regular dates for discussion on the morality of the arms race and the war system. The subject should also be the theme of Sunday school classes and fellowship groups.

5.5.2. Women's groups could discuss and explore two themes related to the arms race and the war system; the way in which women's skills at conflict resolution, nurturing and maximizing use of resources, traditionally confined to the home might serve the public order in changing from a war to a peace system; and how the social service concerns to which so many women's groups are dedicated might be effected by economic conversion.

5.5.3. Young people's groups might explore the probable effects on the quality of life and chance of human survival of the continuation of nuclear testing, present levels of arms spending and the current volume of trade in conventional arms.

5.5.4. Child welfare organizations could discuss the themes suggested in 5.5.2 and 5.5.3 in terms of their effects on the present and future well-being of children.

5.5.5. Hospital aid associations might discuss the relative expenditure on arms and on health care, review the needs and costs in public health and estimate the addition to and variety of health services which might be possible under a reallocation of expenditures from the security to the health sectors.

5.5.6. Senior Citizens groups could discuss the themes suggested in 5.5.5 in terms of services and facilities for the elderly. In countries where the elderly are still integrated and respected members of the social structure they should study all the themes suggested in this section and use their influence to gain popular interest in and support for disarmament.

5.5.7. Farm cooperatives and agricultural communes could explore the relationship of the priority the public places on food production and distribution as compared to that placed on weapons development.

5.5.8. Trade unions and workers groups might study modes of retraining for peace oriented industries and explore the possibilities for economic conversion.

5.5.9. Persons on public assistance or welfare and the unemployed might be given an opportunity to learn about the relationship of employment levels to the trend toward new "sophisticated" and destructive weaponry.

5.5.10. Householders might be given literature on the relationship of inflation to arms production "cost overruns."

5.5.11. Public affairs study and action groups could help the public to understand the effects of the growth of arms expenditures on the development process and on the capacity of governments generally to meet human needs.

5.5.12. Groups devoted to urban improvement could explore the effects of weaponry on the levels of violence in densely populated areas.

These are only a few, admittedly culture-bound recommendations, but they are presented in the hope that additional recommendations from other cultural contexts will be forthcoming.

The selected bibliography contains a limited listing of materials which currently are available for use in carrying out some of the specific recommendations in this section of the report.

6. General Conclusions

At a time in human history when the nations of the world spend 350 billion dollars per annum on the military in the face of mass human suffering from unmet social and economic needs and with the knowledge that relief of such suffering could be realized to a very large degree with the reallocation of such resources; when the human species is threatened with the very real possibility of nuclear annihilation, and daily endures increasing levels of "conventional" violence, there is no more urgent or important area of education than that to promote disarmament. Although the present status of such education is lamentably limited and sadly scattered over the world, nonetheless the possibilities for a significant program of education to promote disarmament exists. Further, in the opinion of this author, a more extensive and thorough study would reveal many more educational resources which could be brought to bear on the development of such a program. Clearly, there is growing public support throughout the world for such efforts. The opportunity should be seized to launch such a project on a global basis with full international participation.

UNESCO is to be commended for its efforts to bring forth the 1974 Recommendation and to initiate programs and experiments for the implementation of those Recommendations. A very special commendation is deserved for undertaking special efforts in the areas of disarmament and human rights, as previously stated, the key issues to the whole question of international understanding and peace.

The author sincerely hopes that this study will be preliminary to a greater assessment of the resources in the area and to a long-range effort to develop the needed program of education to promote disarmament. No more meaningful or necessary program could be undertaken in commemoration of 1979 as the United Nations Year of the Child than the launching of such a world-wide program. Without it no child can look forward to a future unshadowed by the threat of war and destruction nor perhaps to any future at all.

Footnotes

1. Recommendation concerning Education for International Understanding, Co-operation and Peace and Education Relating to Human Rights and Fundamental Freedoms, UNESCO, 1974. All foregoing quotes, except for definitions are from the Recommendation.

2. This poll was taken by the author from November 1976 - March 1977.

3. Johan Galtung, Christian Beck and Johannes Jasstad, "Educational Growth and Educational Dispartiy," University of Oslo, Norway, 1973, a study prepared for UNESCO. The Executive Secretary of PEC believed this research to be relevant to this point.

4. Betty Reardon, "Beyond Nationalism: Education and Survival," *Controversies in Education*, ed. Dwight Allen and Jeffrey Hecht, W.B. Saunders, Co., Philadelphia, PA,1973.

5. Committee on Militarism in Education. Box 271, Nyack, N.Y. 10960.

6. Jack Nelson, "Nationalistic Education," a presentation at the National Council for the Social Studies Convention, Washington, D.C., November 1976.

7. "Between War and Peace: The Quest for Disarmament," *The Bulletin of Peace Proposals*, Vol. 6.

8. National Peace Academy Campaign, 122 Maryland Avenue, N.E. Washington, D.C. 20002, U S.A. William Spencer, Executive Secretary.

9. International Peace Academy, 777 U.N. Plaza, N.Y.C. 10017, U.S.A., General Indar Rikhye, Director.

10. Corporacion Integral Para el Desarrollo Cultural y Social, Apartado Aereo 20439. Bogota, Colombia, Jaime Diaz, Director.

11. The Philippine model is coordinated by Dr. Ludivina, Señora, Chief Research Officer, Department of Education and Culture, Quezon City, The Philippines.

12. Ruth Sivard, *World Military and Social Expenditures 1977*, WMSE Publications, Box 1003, Leesburg, VA, 22075, U.S.A. This report is available free to educators from the Rockefeller Foundation, 1133 Avenue of the Americas, New York, NY 10036.

13. Robert Hanvey, *Toward an Attainable Global Perspective*, Center for Global Perspectives, 218 East 18th, N.Y.C. 10014, U.S.A.

14. Susan Carpenter and the Peace Education Network of COPRED, "Creating the Future," a tape-slide presentation, c/o COPRED, Gustavus Adolphus College, St. Peter, Minnesota, 56082, U.S.A.

15. World Studies Project, c/o One World Trust, Bridge Street, London, S.W.1, England, Robin Richardson, Director.

16. ECPEP, c/o Dr. Frithjof Oertil, 14 Grosse Barlinge, 3 Hanover, BRD.

17. Changing Racial Attitudes Project, c/o Whitman Elementary School, 125 West Montcalm, Pontiac, Michigan, 48010, U.S.A.

18. Sivard, *World Military and Social Expenditures 1977* (See Note 12.)

19. Lloyd Dumas, "Economic Development and the Arms Race," a lecture given at Fordham University, N.Y.C., February 5. 1977.

20. Gene Sharp, "Non-Violent Alternatives to the Arms Race," a lecture given at Fordham University, N.Y.C., March 16, 1976.

21. SIPRI Yearbook 1977, Stockholm International Peace Research Institute, Sveavagen 166, S-113, 46 Stockholm, Sweden.

22. Marion McVitty, *A Comparison and Evaluation of Current Disarmament Proposals*, *1964*, World Law Fund, N.Y.C., U.S.A.

23. Alice D. Tankard, *The Human Family, Human Rights and Peace*, Center for Teaching about Peace and War, Wayne State University, Detroit, Michigan, 48202, U.S.A.

24. Susan Carpenter and the Peace Education Network of COPRED, *A Repertoire of Peace Making Skills*, COPRED, c/o Gustavus Adolphus College, St. Peter, Minnesota, 56082, U.S.A.

25. McVitty, *A Comparison and Evaluation of Current Disarmament Proposals*. (See Note 22.)

SELECTED BIBLIOGRAPHY OF CURRENTLY USED MATERIALS FOR DISARMAMENT EDUCATION

The pool from which these materials were selected was subject to the same limitations as was the data base of the study. However, it must be pointed out that the search for curriculum materials more than any other factor demonstrated the general lack of specific attention to the subject even in peace studies programs.

The items listed here were selected on the basis of the reviewers knowledge of the content, educational context and the evaluation of the educators who use them. The subjects constituting the content are conflict, war, and arms policy, including arms control and disarmament. This list does not comprise a bibliography on peace studies as such, but on the more particular and, in the opinion of the author, most urgent topic of arms and war itself. General, frequently up-dated, bibliographies on peace studies are available from several sources among these are:

COPRED - Consortium on Peace Research Education
and Development
Gustavus Adolphus College
St. Peter, Minnesota 56082, USA

Institute for World Order
1140 Avenue of the Americas
New York, New York 10036, USA

Peace Education Commission (PEC)
International Peace Research Association
Institute for Social Sciences
University of Tromsø
9000 Tromsø, Norway

Exemplar packets of peace studies materials are available from PEC and COPRED.

Inquiries regarding other forms of peace education materials may be addressed to the following institutions and organizations.

ACTION FOR DEVELOPMENT
The Food and Agriculture Organization of the UN
Via delle Termi di Caracalla
00100 Rome, Italy

CENTRE FOR WORLD DEVELOPMENT EDUCATION
25 Wilton Road
London, S.W. 1, England

CHRISTIAN AID
P.O. Box 1
London, S.W. 9, England

CIPRI
Canadian Peace Research Institute
119 Thomas Street
Oakville, Ontario L6J 3A7
Canada

CODECAL
Corporacion Integral Para El Desarrollo Cultural y Social
Apartado Aereo 20439
Bogota, Colombia

COUNCIL FOR EDUCATION IN WORLD CITIZENSHIP
43 Russell Square
London, W.C. 1, England

DEVELOPMENT EDUCATION CENTRE
Selly Oak Colleges
Bristol Road
Birmingham, England

FINNISH U.N. ASSOCIATION
Unioninkatu 45 B, SF-00170
Helsinki 17, Finland

IAEF
International Association of Educators for World Peace
P.O. Box 3282
Blue Spring Station
Huntsville, Alabama 35810, USA

INDIAN ASSOCIATION OF TEACHER EDUCATORS
8B, Bandh Road
Allengariji, Allahabad, (U.P.), India

IRISH COMMISSION FOR PEACE AND JUSTICE
169 Booterstown Avenue
Beackrock, Co. Dublin, Ireland

JAPAN PEACE RESEARCH SOCIETY
1-15-23 Higashi Kaigon, Tsujido
Fujisawa-SHI, Japan 251

LUTHERAN WORLD FEDERATION
Department of Studies
150 route de Ferney
P.O. Box 66
CH-1211, Geneva 20, Switzerland

NATIONAL PEACE COUNCIL
29 Great James Street
London WC1N 3ES, England

NEDERLANDS INSTITUUT VOOR VREDESVRAAGSTUKKEN
Alexanderstraat 7
Postbus 17815
Gravenhage, The Hague, The Netherlands

OXFAM EDUCATION DEPARTMENT
274 Banbury Road
Oxford, England

PEACE EDUCATION COMMISSION OF IPRA
International Peace Research Association
c/o Magnus Haavelsrud
Institute for Social Sciences
University of Tromsø
9000 Tromsø, Norway

PEDAGOGIC INSTITUTION
Box 2109
S-750 02, Uppsala, Sweden

Pierre Deleu
2690 Temse
Heistraat 54, Belgium

UNESCO
Associated Schools Project
United Nations Educational, Scientific and
Cultural Organization
7 Place de Fontenoy
Paris, France

WCCI
World Council for Curriculum and Instruction
Box 171
Teachers' College
Columbia University
New York, New York 10027, USA

WCOTP
The World Confederation of Organizations of the
Teaching Profession
5 Avenue du Moulin
1110 Morges, Switzerland

WEA
World Education Association
c/o School of Education
University of Connecticut
Storrs, CT 06268, USA

WEF
World Education Fellowship
53 Grayskott Road
London SW11 5TS, England

WORLD FRIENDSHIP CENTER
1544 Midoni-Machi
Hiroshima 734, Japan

WORLD STUDIES PROJECT
24 Palace Chambers
Bridge Street
London, SW1A 2J7, England

It should also be noted that the materials were not selected from the very broad literature on disarmament per se, but from only the very limited materials designed for disarmament education. A global survey, review and indexing of all relevant materials for educational purposes would be a major undertaking, but certainly a very useful one and in the opinion of various peace educators one that is necessary.

MATERIALS USED IN ELEMENTARY SCHOOLS

Abrams, Grace, Learning Peace, explores approaches to peace making and alternatives to war, for children 12-14, Jane Addams Peace Association, 1213 Race Street, Philadelphia, PA, 19107, U.S.A.

Abrams, Grace, Peace is in Our Hands, introduces concepts of war and peace and conflict to young children ages 5-11, Jane Addams Peace Association, 1213 Race Street, Philadelphia, PA, 19107, U.S.A.

Danlies, Kathleen, Small World, an anthology on conflict and misunderstanding, Scholastic Book Services, 904 Sylvan Avenue, Englewood Cliffs, NJ, 07632, U.S.A.

Kosakai, Yoshiteru, A-Bomb: A City Tells Its Story, a slide tape presentation composed of drawings and first hand accounts of persons who experienced the atomic bombing of Hiroshima; for further information inquire Japanese Peace Research Society, 1-15-23 Higashi Kaigon, Tsujido, Fujisawa-SHI, Japan 251.

Nakazawa, Keiji, Barefoot Gen, a course book for children telling the story of Keiji, a survivor of the A-Bomb; for further information inquire Japanese Peace Research Society, 1-15-23 Higashi Kaigon, Tsujido, Fujisawa-SHI, Japan 251.

"War/Peace/Disarmament," a series of four publications reported by the Norwegian United Nations Association for pre-school, grades 1-3, grades 4-6, and grades 8 and 9, Norsk Samband for De Forente Nasjoner, Egedet, 1, Oslo 1, Norway.

MATERIALS USED IN SECONDARY SCHOOLS

Audio-visual

Film strips

Hanvey, Robert, "The Global Arms Race: Is National Defense Possible?" two sound film strips, one on the origins, development and future of the nation-state, the other on the history of nuclear weapons and deterrence theory raising questions about the present international system's ability to maintain security, 1970, Social Studies School Services, 10,000 Culver Blvd., Culver City, CA, 90230, U.S.A.

S.A.N.E. "Guns or Butter," slide tape presentation on economics of the arms race, 1923, Washington, D.C., U.S.A.

The New York Times, "Disarmament: The Quest for Peace," sound film strip tracing the history of efforts in arms control and disarmament, 1971, New York City, U.S.A.

Films

Extensive annotated lists of 16 mm films on war, the arms race and security issues are available from:

The Office of Public Information
United Nations
New York, New York, 10017, U.S.A.

The Unitarian Universalist Office at the United Nations
777 United Nations Plaza
New York, New York, 10017, U.S.A.

Simulations

Thorpe, Gerald, *Conflict*, a game based on a model for a disarmed world, Simile II, Del Mar, CA, 92014, U.S.A.

Nesbitt, William, *Guns or Butter*, a game illustrating the consequences of allocating resources to military rather than social needs, Simile II, Del Mar, CA, 92014, U.S.A.

Print

Fraenkel, Jack, Margaret Carter and Betty Reardon, *Peacekeeping*, an exploration of the peacekeeping machinery and disarmament provisions of the League of Nations, United Nations, Bi-polar international system and world government; also contains questions and classroom exercises, 1973, Random House, New York City, U.S.A.

Johnson, Donald, *The Bumpy Road to Disarmament*, reviews preatomic efforts at disarmament, concentrates on SALT and nuclear arms negotiations, Harper & Row, Inc., 10 East 53rd Street, New York, NY 10022, U.S.A.

Lubusch, Arnold H., *Deterrence: World Policy*, a critical analysis of the deterrence system and American-Soviet relations, Harper & Row, Inc., 10 East 53rd Street, New York, NY 10022, U.S.A.

Metcalf, Lawrence, Betty Reardon and Curtis Colby, The Cold War and Beyond: From Deterrence to Detente to What, explores the concepts of balance of terror and stabilized deterrence, encourages students to think about alternatives to the arms race, Random House, available from World Without War Council, 67 East Madison Street, Chicago, Illinois, 60603, U.S.A.

Nesbitt, William, et. al., Teaching Youth About Conflict and War, reviews history of the war system and basic concepts of conflict, National Council for the Social Studies, 1201 16th Street, N.W. Washington, D.C., U.S.A.

Richardson, Robin, Conflict, one booklet in a series of four, containing an excellent unit on arms sales; inquire World Studies Project, 24 Palace Chambers, Bridge Street, London, SW1A 2J7, England.

Richardson, Robin, Learning for Change in World Society, contains lessons on many aspects of peace and justice including war and the arms race, World Study Project, 24 Palace Chambers, Bridge Street, London, SW1A 2J7, England.

Nederlands Instituut Voor Vredesvraagstukken, Praten of Vechten, (Fighting or Talking), published summer 1977. This package treats conflict on various levels. In the textbook various aspects, such as origins, causes, development and settlement of conflicts are described. Wallpictures and a booklet form the materials for the pupils. The wallpictures serve as starting for a discussion about their own experience and feelings about quarreling and fighting. In the booklet there are stories about conflicts at home, at school and in the neighborhood. The manual consists of thirteen lessons around the wallpictures, the stories in the booklet and three extra lessons with conflict game. Alexanderstraat 7, Postbus 17815, Gravenhage, The Hague, The Netherlands.

Nederlands Instituut Voor Vredesvraagstukken, Praten of Vechten - Geweld, (Fighting or Talking - Violence). This package deals with the instrumental use of violence as a means of regulating conflicts between groups in Dutch society. The following kinds of violence and conflict situations can be treated: riots, police violence, terrorism, political violence, civil war, community violence. Alexanderstraat 7, Postbus 17815, Gravenhage, The Hague, The Netherlands.

Nederlands Instituut Voor Vredesvraagstukken, Working Groups on Peace Education for Vocation Schools. For further information, inquire Alexanderstraat 7, Postbus 17815, Gravenhage, The Hague, The Netherlands.

Rockefeller Foundation, Global Studies Kit #1, contains World Military and Social Expenditures, a newspaper condensation of same, teachers guide and wall poster, 1133 Avenue of Americas, New York, New York, 10036, U.S.A.

Sanford, Barbara, Peace-Making: A Guide to Conflict Resolution, explores how to resolve conflicts at all levels from personal to international, Bantum Books, Inc. 666 Fifth Avenue, New York, NY 10019, U.S.A.

Ways & Means of Teaching About World Order; several issues of this teaching newsletter have been devoted to the arms race and disarmament; published by Institute for World Order, 1140 Avenue of Americas, New York, NY, 10036, U.S.A.

N.B. See also annex #9 for variety of recent peace studies materials available from Social Studies School Services.

MATERIALS USED IN UNIVERSITIES

It is impossible to make limited selections since items from the whole literature on disarmament are found in even the few courses on the subject in the universities. A critical annotated bibliography for universities would facilitate including the topic in more courses. However, one new instructional material is worth noting:

> "SALT II Simulation," a videotape produced at Stanford University depicting a simulation and student reactions, available from the U.S. Arms Control and Disarmament Agency, Washington, D.C., U.S.A.

Syllabi for university courses in Peace Studies and bibliographies are available from the Transnational Academic Program, Institute for World Order, 1140 Avenue of Americas, New York, NY 10036, U.S.A. Most materials listed under Adult Education are suitable for university courses.

MATERIALS FOR ADULT EDUCATION

Bulletin of Peace Proposals, vol. 6, "Between War and Peace: The Quest for Disarmament," International Peace Research Association, Oslo, Norway, prepared by an IPRA disarmament study group this short (19 pp.) piece provides an excellent overview of the issues and problems involved in the arms race and attempts at disarmament while documenting the crucial need to disarm. Useful also for teacher training; contains reading list.

Bulletin of Peace Proposals, vol. 8, no. 2, 1977, "Arms Trade and Transfer of Military Technology," eight excellent articles on various aspects of the theme by European and American researchers. Written in readable style suitable to general, but somewhat informed audience. Also contains reviews of recent books on the subject.

Commission to Study the Organization of Peace, *Approaches to Arms Control and Disarmament*, although somewhat technical for adults with some background this report is a very useful survey of sensitive issues in arms control and disarmament negotiations and also provides explicit suggestions for steps to be taken by both governmental and non-governmental organizations, New York, NY, U.S.A., 1976.

Manno, Catherine, "Who's Afraid of Disarmament," reviews fears and obstacles to disarmament, Women's International League for Peace & Freedom, Race Street, Philadelphia, PA, U.S.A., 1977.

Ohlschlager, Rainer and Pax Christi, *Gesucht Friede* (*Search for Peace*), Stuttgart, 1974.

Operation Turning Point distributes packets of materials, bibliographies and films on approaches to disarmament. c/o Institute for World Order, 1140 Avenue of Americas, New York, NY, 10036, U.S.A.

Pfister, Hermann, *Probleme des Friendens* (*Problems of Peace*), treating all topics of peace research including disarmament education. series edited by Pax Christi Freiburg, Stuttgart.

Sivard, Ruth Leger, *World Military and Social Expenditures 1976*, contains data indicated in the title presented largely in graphs and charts with some interpretation by the economist author; makes priorities explicit and understandable even to those formerly unfamiliar with the field; useful also for universities and secondary schools, Leesburg, VA, 22075, U.S.A. Also available from The Rockefeller Foundation, Educational Publishing Program, 1133 Avenue of Americas, New York, NY 10036, U.S.A. (free), and for a charge from the World Without War Bookstore, 67 East Madison Street, Chicago, IL 60603, U.S.A.

Stockholm International Peace Research Institute, World Armaments: The Nuclear Threat, contains statistical, pictorial evidence of trends toward the increased possibility of nuclear war, SIPRI, Sveavagen 166, S-113 46 Stockholm, Sweden, 1977.

Woito, Robert, ed. World Disarmament Kit, the "kit" is actually a selection of readings providing basic facts, contending perspectives, proposals to reverse the arms race, international arms control agreement, what international organizations are doing and suggested initiatives, as well as excellent suggestions on resources for action, World Without War Council, Chicago, IL, 60603, U.S.A., 1977.

N.B. Although there are many more materials available from NGO's, these were selected as together they could form a fairly comprehensive learning package.